

**SUPPORTING CHILDREN AND FAMILIES THROUGH
INVESTMENTS IN HIGH-QUALITY EARLY EDU-
CATION**

HEARING
OF THE
**COMMITTEE ON HEALTH, EDUCATION,
LABOR, AND PENSIONS**
UNITED STATES SENATE
ONE HUNDRED THIRTEENTH CONGRESS
SECOND SESSION
ON
EXAMINING SUPPORTING CHILDREN AND FAMILIES THROUGH
INVESTMENTS IN HIGH-QUALITY EARLY EDUCATION

FEBRUARY 6, 2014

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THURSDAY, FEBRUARY 6, 2014

U.S. SENATE,
COMMITTEE ON HEALTH, EDUCATION, LABOR, AND PENSIONS,
Washington, DC.

The committee met, pursuant to notice, at 10:08 a.m., in room SD-430, Dirksen Senate Office Building, Hon. Tom Harkin, chairman of the committee, presiding.

Present: Senators Harkin, Alexander, Mikulski, Murray, Casey, Franken, Bennet, Murphy, Warren, Isakson, and Scott.

OPENING STATEMENT OF SENATOR HARKIN

The CHAIRMAN. The Committee on Health, Education, Labor, and Pensions will please come to order. I'd like to thank our committee members, witnesses, and audience members in attendance today.

This is going to be the kickoff on some hearings we're having on what I consider to be perhaps one, if not the most, important issue that we're going to look at and try to move legislation on this year, and that is early learning. I look forward to a good, robust discussion today on that topic.

I don't think there's any real disagreement about ensuring that children who benefit from Federal programs should, if they're benefiting, be in a high-quality setting that nurtures their healthy development and growth. I can say factually that my colleague, Senator Alexander, has a great deal of knowledge and passion on these issues, because he led the Subcommittee on Children and Families for many years with Senator Dodd.

Today's hearing will serve as a first in a set of hearings, focusing on early learning. I'll just mention as an aside that next week I have a field hearing in Des Moines to explore how early learning programs have benefited people in Iowa and what issues Congress should consider in terms of what States are doing.

In the second week of April, we'll again convene to discuss early learning with a focus on strengthening the Strong Start for America's Children Act, legislation which I have introduced, currently supported by more than 25 percent, a quarter of the Senate. And as I said, hopefully, we'll have a markup of that legislation in this committee prior to the Memorial Day recess.

We'll be devoting a great deal of time and attention to the subject of early learning. I strongly encourage the members of this committee on both sides of the aisle to hold roundtables and have dis-

cussions on early learning in their local communities, because I don't think there is an issue of greater importance that confronts us today.

I believe access to high-quality early education does increase the likelihood that children will have positive outcomes, a view I am sure is shared by my committee members. I note that 63 percent of respondents to an NBC/*Wall Street Journal* poll, released 2 weeks ago, placed an absolute priority on ensuring access to preschool this year.

The Federal Government supports a variety of programs to support early education and care, such as the Child Care and Development Block Grant program, which we've been talking about, and Head Start. However, I feel these fall short of what is needed.

According to the most recent data from the Department of Health and Human Services, only one in six children eligible for child care assistance received it. Of the preschool kids eligible for Head Start, fewer than half are served. Among infants and toddlers eligible for Early Head Start, less than 5 percent of eligible kids are served.

State governments have done much in recent years to expand preschool offerings to young children. However, according to the National Institute for Early Education Research, States reduced their preschool investments by more than half a billion dollars between 2011 and 2012.

All of this works against a growing awareness that investing in early education yields lifelong benefits. Research by Professor James Heckman, a Nobel laureate, suggests that investment in early education can help reduce the need for special education in the elementary and secondary school years, lower crime rates, increase the likelihood of healthier lifestyles by young people, and prepare these kids for kindergarten.

This is something that I think is desperately needed in our society, a national commitment to quality—and I will emphasize that word, quality—early learning programs, not just sending kids someplace to play around and watch TV, but with qualified people who know how to take care of children in their earliest years, know how to stimulate their thinking, know how to get those developing minds to really grow and to focus on their development.

I look forward to today's panel. We have a distinguished panel. And, as I said, this will be the kickoff in a series of hearings on this. I look forward to hearing from our panel.

I'll yield to our distinguished Ranking Member, Senator Alexander, for his opening statement.

OPENING STATEMENT OF SENATOR ALEXANDER

Senator ALEXANDER. Thanks, Mr. Chairman. Thanks for your long interest in the subject and for having these hearings.

I was an early learner when it came to early childhood education. For 35 years, my mother operated a preschool program in a converted garage in our backyard in Maryville, TN. She and Mrs. Pesterfield had the only two preschool education programs in the county at that time. She had 25 3-year-olds and 4-year-olds in the morning and 25 5-year-olds in the afternoon.

When the State began to license such operations, she threw the welfare inspector out, saying she knew more about it than he did. She did that for 35 years and had nowhere else to put me when I was a child, so I think I'm the only U.S. Senator who went to kindergarten for 5 years.

In the 1960s, she persuaded my father, a former principal who was on the school board, to build kindergarten classrooms in new schools before the State kindergarten program began. In the early 1970s, the Governor announced that statewide kindergarten program at my mother's preschool.

In 1987, Bob Keeshan, formerly known as Captain Kangaroo, and I and my wife started a company that merged with another one and became the largest provider of worksite daycare in the world today. So the question for me is not whether but how to best make early childhood education available to the largest possible number of children to increase equal opportunity.

In doing this, I have four suggestions. First, preschool education doesn't produce miracles. Mark Lipsey, psychologist at Vanderbilt, said,

"Advocates sometimes make preschool sound like you put them in a pre-K washing machine and scrub them clean and they come out after that. But effects of poverty and disadvantaged environments don't work that way. It's a cumulative process. It's going to take cumulative efforts to make a big difference. There is potential here, but we also have to be realistic."

Second, good parenting is the most important factor, and good preschool education doesn't always have to be expensive. For example, one of the most effective programs in Tennessee was my wife's Healthy Children Initiative, which matched expectant mothers with pediatricians, giving every new child a medical home. At least, that was the goal. Helping those mothers become better parents provided those babies with a real head start.

Third, Washington can help, but a national effort to expand effective early education will almost all be State and local effort and State and local money. Remember that 90 percent of elementary and secondary education is paid for by State and local governments.

And, fourth, I believe the best next step for Washington is to spend more effectively the Federal dollars already being spent. A 2012 GAO report found that 45 Federal programs provide some early learning and child care. Twelve of those programs spend about \$15 billion solely on early learning and child care for children under five.

That's \$8.6 billion on Head Start; \$5.3 billion on the Child Care and Development Block Grant, which Senator Mikulski and Senator Harkin have worked very hard on; \$250 million on Race to the Top Early Learning Challenge Fund; \$790 million under the Individuals with Disabilities Education Act; another \$3 billion through the Federal Tax Code on early child care education credits and exclusions for employer-provided care. That adds up to 18 billion Federal dollars already being spent.

States spend about \$5 billion more on preschool, according to the National Institute for Early Education research. Add to that pri-

vate and local spending and it begins to add up. According to the General Accountability Office, these numerous efficiencies have created a, “fragmentation of efforts, some overlap of goals or activities, and potential confusion among families and other program users.”

Let me suggest one way I believe we could greatly expand effective access to preschool and one way we shouldn’t. We should fully implement the 200 Head Start Centers of Excellence program Congress authorized in 2007. Senator Harkin, Senator Mikulski, Senator Enzi, and I worked on that. It encourages and puts the spotlight on those cities and communities already doing the best job of coordinating the 18 billion Federal dollars being spent with the billions of other dollars being spent by States and local entities.

We first proposed this in 2003. It was included in 2007. In 2009, Congress appropriated \$2 million for these centers, 10 of them, for a period of up to 5 years. One of those from Denver is represented here today. Full funding would cost another \$90 million. At the end of 5 years, we could take a look at the next reauthorization of Head Start and see what we have learned.

Here’s what I believe we should not do—and I’ll conclude with this—and that is to fall back into the familiar Washington pattern of noble intentions, grand promises, lots of Federal mandates, and send the bill to the States with disappointing results. I’m afraid that describes the president’s proposal for preschool for all. To former Governors like me, it sounds a lot like Medicaid, a program of Federal promises and mandates that has become a costly burden to the States.

Here’s another grand promise: \$75 billion over 10 years to expand preschool for 4-year-olds that live below 200 percent of the Federal poverty definition, and then many expensive Washington requirements concerning teacher qualifications, class size, child to instructor ratios, teacher salaries, early learning standards.

A nearly identical plan has been introduced here in the Senate, and just like Medicaid, both proposals sent huge bills for all this to the States. States would pay only about 10 percent the first year, but after 10 years, up to 50 percent or 75 percent.

This is the Medicaid model that is burdening States today, soaking up dollars that States would otherwise spend on education, including preschool education. When I was Governor of Tennessee in the 1980s, Medicaid was 8 percent of our State budget. Today, it’s 30 percent.

My recommendation for the best next step toward the goal of giving access to preschool education for the largest number of children is to fully implement the 200 Head Start Centers of Excellence program, enabling States to pool existing funds, try different approaches, and figure out what works for their populations and children, rather than forcing upon States from Washington another set of grand promises, expensive mandates, and disappointing results.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Alexander.

Again, we welcome our witnesses here. I’d like to start by welcoming our first witness, Dr. Hirokazu Yoshikawa. I think I got that right. Dr. Yoshikawa is a tenured professor of education and psychology and co-director of the Institute for Globalization and

Education at the Steinhardt School of Culture, Education and Human Development at New York University.

In 2011, Dr. Yoshikawa was nominated by President Obama and confirmed by the Senate to serve on the National Board for Education Sciences. In 2013, he was elected to the National Academy of Education.

Next is Mr. John White. Mr. White currently serves the State of Louisiana as its State Superintendent of Education. Previously, he served as Superintendent of the Recovery School District in New Orleans. In that capacity, he led efforts to overhaul failing schools, establish a unified enrollment system, and expanded the New Orleans school construction program to ensure that every school building was rebuilt or renovated. In 2006, Mr. White served as the deputy chancellor of Talent, Labor, and Innovation for New York City.

Our next witness is Ms. Danielle Ewen. Ms. Ewen is director of the Office of Early Childhood Education for the District of Columbia Public Schools, where she oversees programs serving children ages 3 and 4 in high-quality, comprehensive, preschool classrooms. Prior to her work for the DC public schools, Ms. Ewen served as director of the Child Care and Early Education Team at the Center for Law and Social Policy, where she worked on Federal and State issues around child care and early education, particularly the reauthorizations of the Child Care and Development Block Grant and Head Start.

Ms. Ewen has worked at the Children's Defense Fund as a Senior Program Associate in the Child Care and Development Division. She was Assistant Director for the National Child Care Information Center.

I will turn to Senator Bennet for purposes of our final introduction.

STATEMENT OF SENATOR BENNET

Senator BENNET. Thank you, Mr. Chairman. I want to thank you and the Ranking Member for holding this hearing. I apologize for not being able to stay because I've got a Colorado delegation meeting that I have to do.

But I did want to come to introduce Ms. Brantley and also to say that, as you know, I'm an advocate for maximizing flexibility at the local level and the way the Federal dollars are spent. As far as I'm concerned, every one of these Federal dollars could be well-spent on early childhood education. But that's a topic for another day.

Today, it's my honor to introduce Ms. Charlotte Brantley to the committee. Ms. Brantley has dedicated her life to early childhood care and education, and it shows. For the past several years, she served as president and CEO of Clayton Early Learning in Denver, CO.

Clayton provides high-quality early childhood care and education to more than 600 children. The Department of Health and Human Services has recognized that Clayton is one of the 10 National Centers of Excellence in Early Childhood Education.

Charlotte brings a wealth of knowledge from her varied experiences in early education. She served as director of Child Care and Development for the State of Texas. She led the Child Care Bureau at the Department of Health and Human Services, managing a \$4

billion budget, and was a senior director of PBS's Ready to Learn television service.

At Clayton, she oversees several early childhood programs, all of which are research-based and results-driven. She also helps provide statewide coaching and training services to more than 2,500 educators and leaders. Through these efforts, Clayton shares innovative teaching practices across the State and improves the quality of learning for thousands of children.

Charlotte has been an exemplary leader in early childhood education, both nationally and in Colorado, and we welcome her here today. I look forward to hearing her testimony and to working with my colleagues on both sides of the aisle on this important issue.

It's also good to see Superintendent John White here. I want to congratulate you for all the amazing work you're doing in the State of Louisiana.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Bennet.

Again, we welcome you all. We have a very distinguished panel here to kick off this series of hearings on this legislation. I might say at the outset that I've tried to scrub my language a little bit. I used to always refer to it as preschool until I heard a speaker one time say that, no, there should be no such thing, because education begins at birth, and the preparation for education begins before birth.

Therefore, I've tried to change it from preschool to early learning, because school starts, as he said, even before you're born. That's just an aside. That's why, even though I sometimes slip and call it preschool, I still think of it as early learning programs.

I've read through your statements. They're very good. They'll each be made a part of the record in their entirety. I'd like to start with Dr. Yoshikawa, and we'll work down. If you could just take 5 minutes—that's what the clock says. If you run over just a little bit, I won't mind. But if you could give us the highlights so that we can engage in a conversation, I would appreciate it.

Dr. Yoshikawa, we'll start with you. Please proceed.

**STATEMENT OF HIROKAZU YOSHIKAWA, COURTNEY SALE
ROSS UNIVERSITY PROFESSOR OF GLOBALIZATION AND
EDUCATION AT THE STEINHARDT SCHOOL OF CULTURE,
EDUCATION AND HUMAN DEVELOPMENT, NEW YORK UNI-
VERSITY, NEW YORK, NY**

Mr. YOSHIKAWA. Mr. Chairman and members of the committee, thank you very much for the opportunity to appear before you today. I teach at New York University in the Steinhardt School of Culture, Education and Human Development, and I've conducted research for over 20 years on early childhood programs and policies.

Proposals on universal preschool education are being debated across the country. The goal of my testimony is to tell you what the current science base on preschool evaluations shows that is useful for this debate.

I'll present evidence from two sources, a meta-analysis of all the rigorous studies of preschool education, 84 of them, going back to 1960; and a comprehensive recent review called Investing in Our

Future, where we focus on the most recent 15 years of research. Investing in Our Future was written by myself and nine leading experts in preschool research with input from 20 additional experts.

So what does this exciting new wave of evidence tell us? It shows us a few things we didn't know 10 years ago about investing in children during the years when the developing brain is particularly sensitive to the quality of the environment.

First, high-quality preschool has shown evidence of substantial impacts on children's learning when implemented at large scale. Second, quality preschool can produce positive returns on investment at scale, not just in small demonstration programs.

Third, the most effective way to improve quality is to combine evidence-based curricula with weekly or biweekly coaching and mentoring in the classroom. And, finally, benefits extend to near poor and moderate-income children as well as the poor.

I'm going to tell you a little bit more about each of these four points. First, we know from the meta-analysis, looking across 84 studies of preschool, that, overall, preschool education increases children's learning. But these studies have mostly been in small-scale circumstances.

We now have evidence that large-scale preschool programs, not just small, can have substantial positive effects on children. Children in studies on Tulsa's and Boston's universal pre-K programs showed between a half and a full year of additional growth in reading and math skills above and beyond comparison group children.

What's particularly impressive about that is that most of the comparison group children were in other centers or preschools. So these are large effects in comparison above and beyond centers and other preschool settings. Studies on some State programs like New Jersey are also showing important benefits for kids.

Second, we have new evidence on the returns to investment of quality preschool. We've known for a long time that the Perry Preschool Program implemented in the 1960s saved \$7 for every dollar spent, increased high school graduation and earnings, and reduced crime.

What's new is a recent study on the citywide Tulsa pre-kindergarten program by the economist, Tim Bartik. He showed that the Tulsa program saved over \$3 for every dollar invested, and that's based on projected adult earnings benefits alone, not other benefits. Preliminary data from Boston suggests a similar pattern of return on investment. As the Nobel prize-winning economist James Heckman argues, high-quality preschool, if implemented nationally, would have societal benefits with substantial increases in the skills and productivity of the next generation.

But how can we actually implement high-quality preschool at scale? An exciting set of over a dozen rigorous, controlled evaluations that we review shows that the combination of two important elements, curricula focused on specific aspects of learning and weekly or biweekly coaching and mentoring in the classroom, can substantially improve the kind of quality that matters most, and that is the responsiveness of interactions and quality of instruction provided by teachers, such as Senator Alexander's mother.

Why are curricula important? Focused curricula provide a structured way to promote specific developmental skills in children. These are not about rote learning or pushing down second grade instruction into preschool. All of these curricula have at their core play-based activities that preschoolers and teachers actually enjoy.

And we have a choice of evidence-based curricula. Among the dozen studies, some show success with curricula focused on language and literacy, some with math, and some with social and emotional development.

Why coaching in the classroom? It's simple. The science of adult learning tells us that we learn more from supportive feedback in the workplace than from didactic lectures and workshops. Yet often, professional development in preschool is only workshops and lectures. Professional development with supportive coaching tailored to the teacher's skill levels is more likely to produce learning impact for both teachers and children.

This combination of curriculum and coaching has been proven in these studies, not only in public pre-K systems, but also in Head Start and also in both home and center-based child care. So we know now how to improve quality in a variety of delivery systems and during the critical period of zero to three when brain development is most rapid. Of course, we can't ignore also improving kindergarten through third grade quality to build on the benefits of high-quality preschool.

My final point is that high-quality preschool benefits moderate-income children as well as poor children, children with special needs as well as those typically developing, and dual language learners and children of immigrants as well as native English speakers. For example, the returns on investment were robust for both moderate-income and poor children in Tulsa, and the same for Boston.

When children from different economic classes mix in preschool classrooms, all children benefit. At the same time, poorer children benefit more than middle class kids. That's why these programs have reduced school readiness gaps. The Boston universal preschool program, for example, completely wiped out the Latino-white school readiness gap in early reading and math skills and substantially reduced black-white and income-based gaps.

Thank you again for this opportunity, and I look forward to your questions.

[The prepared statement of Mr. Yoshikawa follows:]

PREPARED STATEMENT OF HIROKAZU YOSHIKAWA

SUMMARY*

Proposals on preschool education are currently the focus of national as well as State and city deliberations. The goal of this testimony is to inform the committee about what the evidence base of rigorous preschool evaluations shows that may be useful for these discussions.

Large-scale public preschool programs have shown substantial impacts on children's early learning. Scientific evidence on the impacts of early childhood

*Adapted from Hirokazu Yoshikawa, Christina Weiland, Jeanne Brooks-Gunn, Margaret Burchinal, Linda M. Espinosa, William T. Gormley, Jens O. Ludwig, Katherine A. Magnuson, Deborah A. Phillips, and Martha J. Zaslow (2013). *Investing in Our Future: The Evidence Base on Preschool Education*. New York: Foundation for Child Development and Ann Arbor, MI: Society for Research in Child Development.

education has progressed well beyond the landmark Perry Preschool and Abecedarian studies. A recent meta-analysis integrating evaluations of 84 preschool programs concluded that, on average, children gain about a third of a year of additional growth across language, reading, and math skills, above and beyond comparison groups. At-scale preschool programs in Tulsa and Boston have produced larger gains of between a half and a full year of additional growth in reading and math, above and beyond comparison groups (most of whom attended other centers or preschools). Benefits to children's socio-emotional development have been documented in programs that focus intensively on these areas.

Quality preschool education provides strong returns on investment. Available benefit-cost estimates based on older, intensive interventions, such as the Perry Preschool Program, as well as contemporary, large-scale public preschool programs, such as the Chicago Parent Child Centers and Tulsa's preschool program, range from \$3 to \$7 saved for every dollar spent.

The combination of curricula focused on specific aspects of learning and in-person coaching and mentoring has proven successful in improving quality in public pre-K, Head Start, and child care systems. Children benefit most when teachers are emotionally supportive and engage in stimulating interactions that support learning. Interactions that help children acquire new knowledge and skills provide input to children, elicit verbal responses and reactions from them, and foster engagement in and enjoyment of learning. Recent evaluations tell us that effective use of curricula focused on such specific aspects of learning as language and literacy, math, or social and emotional development provide a substantial boost to children's learning. Guidelines about the number of children in a classroom, the ratio of teachers and children, and staff qualifications and compensation help to increase the likelihood of—but do not assure—supportive and stimulating interactions.

Coaching or mentoring that provides support to the teacher on how to implement content-rich and engaging curricula shows substantial promise in helping to assure that such instruction is being provided. Such coaching or mentoring involves modeling positive instructional approaches and providing feedback on the teacher's implementation in a way that sets goals but is also supportive. This feedback and exchange can occur in the classroom or through web-based video.

Quality preschool education can benefit middle-class children as well as disadvantaged children; typically developing children as well as children with special needs; and dual language learners as well as native speakers. Although early research focused only on programs for low-income children, more recent research focusing on universal preschool programs provides the opportunity to ask if preschool can benefit children from middle-income as well as low-income families. The evidence is clear that middle-class children *can* benefit substantially, and that benefits outweigh costs for children from middle income as well as those from low-income families. However, children from low-income backgrounds benefit more. Studies of both Head Start and public preK programs suggest that dual language learners benefit as much as, and in some cases more than, their native speaker counterparts. Finally, two large-scale studies show that children with special needs benefit from large-scale preschool programs that take an inclusion approach.

A second year of preschool shows additional benefits. The few available studies, which focus on disadvantaged children, show further benefits from a second year of preschool. However, the gains are not always as large as from the first year of preschool. This may be because children who attend 2 years of preschool are not experiencing a sequential building of instruction from the first to the second year. In addition, quality preschool should be followed by efforts to implement higher quality in kindergarten through third grade and beyond.

Long-term benefits can occur despite convergence of test scores. As children from low-income families in preschool evaluation studies are followed into elementary school, differences between those who received preschool and those who did not on tests of academic achievement are reduced. However, evidence from long-term evaluations of both small-scale, intensive interventions and Head Start suggest that there are medium-term impacts on outcomes such as reduced grade repetition and reduced special education referrals, and long-term effects on societal outcomes such as high-school graduation, years of education completed, earnings, and reduced crime and teen pregnancy, even after test-score effects decline to zero. Research is now underway focusing on why these long-term effects can occur even when test scores converge.

There are important benefits of comprehensive services when these added services are carefully chosen and targeted. When early education provides comprehensive services, it is important that these extensions of the program aim at services and practices that show benefits to children and families. Early edu-

cation programs that have focused in a targeted way on health outcomes (e.g., facilitating a regular medical home; integrating comprehensive screening; requiring immunizations) have shown such benefits as an increase in receipt of primary medical care and dental care. In addition, a parenting focus can augment the effects of preschool on children's skill development, but only if it provides parents with modeling of positive interactions or opportunities for practice with feedback. Simply providing information through classes or workshops is not associated with further improvements in children's skills.

Mr. Chairman and members of the committee, thank you for the opportunity to appear before you today. My name is Dr. Hirokazu Yoshikawa, and I am the Courtney Sale Ross University Professor of Globalization and Education at New York University, in the Steinhardt School of Culture, Education and Human Development. I have conducted research since the early 1990s on early childhood development programs and policies.[†]

National legislation on publicly funded preschool education is again the focus of prominent debate in the United States. At present, 42 percent of 4-year-olds attend publicly funded preschool (28 percent attend public pre-Kindergarten programs, 11 percent Head Start, and 3 percent special education preschool programs).¹ A considerable and healthy debate about the merits of preschool education is in process. However, in some of these discussions, the most recent evidence has not yet been included for consideration. The goal of this testimony is to provide a non-partisan and thorough review of the current science and evidence base on early childhood education (ECE) that includes the most recent research. I represent an interdisciplinary group of early childhood experts, including Christina Weiland, Jeanne Brooks-Gunn, Margaret Burchinal, Linda Espinosa, William Gormley, Jens Ludwig, Katherine Magnuson, Deborah Phillips and Martha Zaslow. We recently conducted an extensive review of rigorous evidence on why early skills matter, the short- and long-term effects of preschool programs on children's school readiness and life outcomes, the importance of program quality, which children benefit from preschool (including evidence on children from different family income backgrounds), and the costs versus benefits of preschool education. We also incorporated comments and feedback from 20 additional experts in early childhood development and preschool evaluation. Here, I focus on preschool (early childhood education) for 4-year-olds, with some review of the evidence for 3-year-olds when relevant. We do not discuss evidence regarding programs for 0–3-year-olds.

SUMMARY POINTS

Large-scale public preschool programs have shown substantial impacts on children's early learning. Scientific evidence on the impacts of early childhood education has progressed well beyond the landmark Perry Preschool and Abecedarian studies. A recent meta-analysis integrating evaluations of 84 preschool programs concluded that, on average, children gain about a third of a year of additional growth across language, reading, and math skills, above and beyond comparison groups. At-scale preschool programs in Tulsa and Boston have produced larger gains of between a half and a full year of additional growth in reading and math, above and beyond comparison groups (most of whom attended other centers or preschools). Benefits to children's socio-emotional development have been documented in programs that focus intensively on these areas.

Quality preschool education provides strong returns on investment. Available benefit-cost estimates based on older, intensive interventions, such as the Perry Preschool Program, as well as contemporary, large-scale public preschool programs, such as the Chicago Parent Child Centers and Tulsa's preschool program, range from \$3 to \$7 saved for every dollar spent.

The combination of curricula focused on specific aspects of learning and in-person coaching and mentoring has proven successful in improving quality in public preK, Head Start, and child care systems. Children benefit most when teachers are emotionally supportive *and* engage in stimulating interactions that support learning. Interactions that help children acquire new knowl-

[†]Testimony is adapted from Hirokazu Yoshikawa, Christina Weiland, Jeanne Brooks-Gunn, Margaret Burchinal, Linda M. Espinosa, William T. Gormley, Jens O. Ludwig, Katherine A. Magnuson, Deborah A. Phillips, and Martha J. Zaslow (2013). *Investing in Our Future: The Evidence Base on Preschool Education*. New York: Foundation for Child Development and Washington, DC: Society for Research in Child Development. http://www.srcd.org/sites/default/files/documents/washington/mb_2013_10_16_investing_in_children.pdf; <http://fcd-us.org/sites/default/files/Evidence%20Base%20on%20Preschool%20Education%20FINAL.pdf>.

edge and skills provide input to children, elicit verbal responses and reactions from them, and foster engagement in and enjoyment of learning. Recent evaluations tell us that effective use of curricula focused on such specific aspects of learning as language and literacy, math, or social and emotional development provide a substantial boost to children's learning. Guidelines about the number of children in a classroom, the ratio of teachers and children, and staff qualifications help to increase the likelihood of—but do not assure—supportive and stimulating interactions.

Coaching or mentoring that provides support to the teacher on how to implement content-rich and engaging curricula shows substantial promise in helping to assure that such instruction is being provided. Such coaching or mentoring involves modeling positive instructional approaches and providing feedback on the teacher's implementation in a way that sets goals but is also supportive. This feedback and exchange can occur in the classroom or through web-based video.

Quality preschool education can benefit middle-class children as well as disadvantaged children; typically developing children as well as children with special needs; and dual language learners as well as native speakers. Although early research focused only on programs for low-income children, more recent research focusing on universal preschool programs provides the opportunity to ask if preschool can benefit children from middle-income as well as low-income families. The evidence is clear that middle-class children *can* benefit substantially, and that benefits outweigh costs for children from middle-income as well as those from low-income families. However, children from low-income backgrounds benefit more. Studies of both Head Start and public preK programs suggest that dual language learners benefit as much as, and in some cases more than, their native speaker counterparts. Finally, two large-scale studies show that children with special needs benefit from large-scale preschool programs that take an inclusion approach.

A second year of preschool shows additional benefits. The few available studies, which focus on disadvantaged children, show further benefits from a second year of preschool. However, the gains are not always as large as from the first year of preschool. This may be because children who attend 2 years of preschool are not experiencing a sequential building of instruction from the first to the second year. In addition, quality preschool should be followed by efforts to implement higher quality in kindergarten through third grade and beyond.

Long-term benefits can occur despite convergence of test scores. As children from low-income families in preschool evaluation studies are followed into elementary school, differences between those who received preschool and those who did not on tests of academic achievement are reduced. However, evidence from long-term evaluations of both small-scale, intensive interventions and Head Start suggest that there are medium-term impacts on outcomes such as reduced grade repetition and reduced special education referrals, and long-term effects on societal outcomes such as high-school graduation, years of education completed, earnings, and reduced crime and teen pregnancy, even after test-score effects decline to zero. Research is now underway focusing on why these long-term effects can occur even when test scores converge.

There are important benefits of comprehensive services when these added services are carefully chosen and targeted. When early education provides comprehensive services, it is important that these extensions of the program aim at services and practices that show benefits to children and families. Early education programs that have focused in a targeted way on health outcomes (e.g., facilitating a regular medical home; integrating comprehensive screening; requiring immunizations) have shown such benefits as an increase in receipt of primary medical care and dental care. In addition, a parenting focus can augment the effects of preschool on children's skill development, but only if it provides parents with modeling of positive interactions or opportunities for practice with feedback. Simply providing information through classes or workshops is not associated with further improvements in children's skills.

DETAILED DISCUSSION

Early skills matter, and preschool can help children build these skills.

The foundations of brain architecture, and subsequent lifelong developmental potential, are laid down in the early years in a process that is exquisitely sensitive to external influence. Early experiences in the home, in other care settings, and in communities interact with genes to shape the developing nature and quality of the brain's architecture. The growth and then environmentally based pruning of neuronal systems in the first years support a range of early skills, including cognitive (early language, literacy, math), social (theory of mind, empathy, prosocial), persistence, attention, and self-regulation and executive function skills (the vol-

untary control of attention and behavior).² Later skills—in schooling and employment—build cumulatively upon these early skills. Therefore investment in early learning and development results in greater cost savings than investment later in the life cycle.³ The evidence reviewed below addresses the role of preschool in helping children build these skills.

Rigorous evidence suggests positive short-term impacts of preschool programs.

Effects on language, literacy, and mathematics. Robust evidence suggests that a year or two of center-based ECE for three- and 4-year-olds, provided in a developmentally appropriate program, will improve children's early language, literacy, and mathematics skills when measured at the end of the program or soon after.⁴ These findings have been replicated across dozens of rigorous studies of early education programs, including small demonstration programs and evaluations of large public programs such as Head Start and some State pre-K programs. Combining across cognitive (e.g., IQ), language (e.g., expressive and receptive vocabulary) and achievement (e.g., early reading and mathematics skills) outcomes, a recent meta-analysis including evaluations of 84 diverse early education programs for young children evaluated between 1965 and 2007 estimated the average post-program impact to be about .35 standard deviations.⁵ This represents about a third of a year of additional learning, above and beyond what would have occurred without access to preschool. These data include both the well-known small demonstration programs such as Perry Preschool, which produced quite large effects, as well as evaluations of large preschool programs like Head Start, which are characterized both by lower cost but also more modest effects. Two recent evaluations of at-scale urban programs, in Tulsa and Boston, showed large effects (between a half of a year to a full year of additional learning) on language, literacy and math.⁶

Effects on socio-emotional development. The effects of preschool on socio-emotional development⁷ are not as clear-cut as those on cognitive and achievement outcomes. Far fewer evaluation studies of general preschool (that is, preschool without a specific behavior-focused component) have included measures of these outcomes. And relative to measures of achievement, language and cognition, socio-emotional measures are also more varied in the content they cover and quality of measurement.

A few programs have demonstrated positive effects on children's socioemotional development. Perry Preschool was found to have reduced children's externalizing behavior problems (such as acting out or aggression) in elementary school.⁸ More recently, the National Head Start Impact Study found no effects in the socioemotional area for 4-year-old children, although problem behavior, specifically hyperactivity, was reduced after 1 year of Head Start among 3-year-olds.⁹ An evaluation of the Tulsa pre-Kindergarten program found that pre-Kindergarten attendees had lower levels of timidity and higher levels of attentiveness, suggesting greater engagement in the classroom, than was the case for other students who neither attended pre-Kindergarten nor Head Start. However, there were no differences among pre-Kindergarten and other children in their aggressive or hyperactive behavior.¹⁰ A recent explanation for the divergence of findings is suggested by meta-analytic work on aggression, which found that modest improvements in children's aggressive behavior occurred among programs that made improving children's behavior an explicit goal.¹¹

Effects on health. The effects of preschool on children's health have been rigorously investigated only within the Head Start program; Head Start directly targets children's health outcomes, while many preschool programs do not. Head Start has been shown to increase child immunization rates. In addition, there is evidence that Head Start in its early years of implementation reduced child mortality, and in particular mortality from causes that could be attributed plausibly to aspects of Head Start's health services, particularly immunization and health screening (e.g., measles, diabetes, whooping cough, respiratory problems, etc).¹² More recently, the national Head Start Impact Study found somewhat mixed impacts on children's health outcomes between the end of the program and the end of first grade.¹³ Head Start had small positive impacts on some health indicators, such as receipt of dental care, whether the child had health insurance, and parents' reports of whether their child had good health, at some post-program time points but not at others. Head Start had no impact at the end of first grade on whether the child had received care for an injury within the last month or whether the child needed ongoing care. The positive impacts of Head Start on immunization, dental care and some other indicators may be due to features of its health component—the program includes preventive dental care, comprehensive screening of children, tracking of well-child visits and required immunizations, and assistance if needed with accessing a regular medical

home. In contrast to the literature on Head Start and health outcomes, there are almost no studies of the effects of public pre-Kindergarten on children's health.

A second year of preschool shows additional benefits.

There are few studies that have examined the relative impact of 1 vs. 2 years of preschool education, and none that randomly assigned this condition. All of the relevant studies focus on disadvantaged children. The existing evidence suggests that more years of preschool seem to be related to larger gains, but the added impact of an additional year is often smaller than the gains typically experienced by a 4-year-old from 1 year of participation.¹⁴ Why the additional year generally results in smaller gains is unclear. It may be that children who attend multiple years experience the same curriculum across the 2 years rather than experiencing sequenced 2-year curricula, as many programs mix 3-year-old and 4-year-olds in the same classroom.

Children show larger gains in higher-quality preschool programs.

Higher-quality preschool programs have larger impacts on children's development while children are enrolled in the program and are more likely to create gains that are sustained after the child leaves preschool. Process quality features—children's immediate experience of positive and stimulating interactions—are the most important contributors to children's gains in language, literacy, mathematics and social skills. Structural features of quality (those features of quality that can be changed by structuring the setting differently or putting different requirements for staff in place, like group size, ratio, and teacher qualifications) help to create the conditions for positive process quality, but do not ensure that it will occur.

For example, smaller group sizes and better ratios of staff to children provide the right kind of setting for children to experience more positive interactions. But this context itself is not enough. Teacher qualifications such as higher educational attainment and background, certification in early childhood, or higher than average compensation for the field are features of many early education programs that have had strong effects. Yet here too, research indicates that qualifications alone do not ensure greater gains for children during the course of the preschool years.¹⁵ To promote stronger outcomes, preschool programs should be characterized by both structural features of quality *and* ongoing supports to teachers to assure that the immediate experiences of children, those provided through activities and interactions, are rich in content and stimulation, while also being emotionally supportive.

The aspects of process quality that appear to be most important to children's gains during the preschool years include teachers providing frequent, warm and responsive interactions.¹⁶ In addition, teachers who encourage children to speak, with interactions involving multiple turns by both the teacher and child to discuss and elaborate on a given topic, foster greater gains during the preschool year, across multiple domains of children's learning.¹⁷ Both the warm and responsive interaction style and elaborated conversations also predict the persistence of gains into the school years.¹⁸ Some evidence suggests that children who have more opportunities to engage in age-appropriate activities with a range of varied materials such as books, blocks, and sand show larger gains during the preschool years (and those gains are maintained into the school years).¹⁹

Quality in preschool classrooms is in need of improvement, with instructional support levels particularly low.

Both longstanding and more recent research reveal that the average overall quality of preschool programs is squarely in the middle range of established measures. In large-scale studies of public pre-Kindergarten, for example, only a minority of programs are observed to provide excellent quality; a comparable minority of programs are observed to provide poor quality.²⁰ It is therefore not surprising that impacts of most of the rigorously evaluated public pre-Kindergarten programs fall shy of those in Tulsa and Boston (in the small to moderate range for reading and math, that is, a few months of added learning, rather than the half-year to full-year of additional learning that was found in Tulsa and Boston).²¹ Head Start programs also show considerable variation in quality. While few programs are rated as having "poor" quality, research suggests that as in studies of many public pre-Kindergarten programs, Head Start programs on average show instructional quality levels well below the midpoint of established measures.²² In sum, there is variation in quality in both Head Start and pre-Kindergarten nationally, with no clear pattern of one being stronger in quality than the other in the existing research. It is important to note here that funding streams are increasingly mixed on the ground, with pre-Kindergarten programs using Head Start performance standards or programs having fully blended funds; thus, these two systems are no longer mutually exclusive in many locales.

High-quality programs implemented at scale are possible, according to recent research. Evaluation evidence on the Tulsa and Boston pre-Kindergarten programs shows that high-quality public pre-K programs can be implemented across entire diverse cities and produce substantial positive effects on multiple domains of children's development. Assuring high quality in these public programs implemented at scale has entailed a combination of program standards, attention to teacher qualifications and compensation, additional ongoing onsite quality supports such as the ones described previously, and quality monitoring.

The combination of developmentally focused, intensive curricula with integrated, in-classroom professional development can boost quality and children's skills.

Curricula can play a crucial role in ensuring that children have the opportunity to acquire school readiness skills during the preschool years. Preschool curricula vary widely. Some, typically labeled "global" curricula, tend to have a wide scope, providing activities that are thought to promote socio-emotional, language, literacy, and mathematics skills and knowledge about science, arts, and social studies. Other curricula, which we label "developmentally focused", aim to provide intensive exposure to a given content area based on the assumption that skills can be better fostered with a more focused scope.²³

Global curricula have not often been evaluated rigorously. However, the evidence that exists from evaluations by independent evaluators suggests no or small gains associated with their use, when compared with curricula developed by individual teachers or to other commercially available or researcher-developed curricula.²⁴ A revised version of such a curriculum is currently being evaluated via a randomized trial.²⁵

As for developmentally focused curricula, several recent experimental evaluations have demonstrated moderate to large gains in the targeted domains of children's development, for math curricula,²⁶ language and literacy curricula,²⁷ and curricula directed at improving socio-emotional skills and self-regulation, compared to usual practice in preschool classrooms,²⁸ which typically involve more global curricula.

Most of the successful curricula in these recent evaluations are characterized by intensive professional development that often involves coaching at least twice a month, in which an expert teacher provides feedback and support for in-classroom practice, either in person or in some cases through observation of videos of classroom teaching. Some curricula also incorporate assessments of child progress that are used to inform and individualize instruction, carried out at multiple points during the preschool year. These assessments allow the teacher to monitor the progress of each child in the classroom and modify her content and approach accordingly.

This recent set of research suggests that intensive, developmentally focused curricula with integrated professional development and monitoring of children's progress offer the strongest hope for improving classroom quality as well as child outcomes during the preschool years. However, more evidence is needed about the effectiveness of such curricula, particularly studies of curricula implemented without extensive support of the developer, or beyond initial demonstrations of efficacy.²⁹ That is, the majority of rigorously conducted trials of developmentally focused curricula have included extensive involvement of the developer(s) and have occurred on a relatively small scale. There have been only a few trials of curricula in "real world" conditions—meaning without extensive developer(s)' involvement and across a large program. Some notable recent results in "real world" conditions show promise that substantial effects can be achieved,³⁰ but more such studies are needed given the widely noted difficulties in taking interventions to scale.³¹

A recent development in early childhood curricula is the implementation of integrated curricula across child developmental domains (for example, socio-emotional and language; math and language), which retain the feature of defined scope for each area. In two recent successful instances, efforts were made to ensure feasible, integrated implementation; importantly, coaches and mentor teachers were trained across the targeted domains and curricula.³²

In addition to in-classroom professional development supports, the pre-service training and education of teachers is of critical concern in the field of preschool education. However, here evaluation research is still scant. There are a range of recent innovations—for example, increasing integration of practical and in-classroom experiences in higher education teacher preparation courses; hybrid web-based and in-person training approaches; and attention to overlooked areas of early childhood teacher preparation such as work with children with disabilities, work with children learning two languages, or teaching of early math skills. However, these innovations have yet to be fully evaluated for their impact on teacher capacities or preschool program quality.³³

Over the course of elementary school, scores for children who have and have not had preschool typically converge. Despite this convergence, there is some evidence of effects on societally important outcomes in early adulthood.

As children in preschool evaluation studies are followed into elementary school, the differences between those who received preschool and those who did not are typically reduced, based on the available primary-school outcomes of evaluations (chiefly test scores of reading and math achievement). This phenomenon of reduced effect sizes on test scores over time is often labeled “fadeout.”³⁴ We use the term convergence, as this term more accurately captures how outcomes like test scores of children who participated vs. did not participate in preschool converge over time as the non-attenders catch-up. There is not yet a strong evidence base on reasons for the convergence of test scores in follow-up evaluations of children after early childhood. A number of factors may be involved—for example, low quality of primary schooling, particularly for students in disadvantaged areas, may fail to build on the gains created by early childhood education.³⁵ Having students who attended and benefited from preschool may also permit elementary-school teachers to focus more on the non-attenders, and this extra attention may explain the convergence or catch-up pattern.

Persistence of effects in landmark, small demonstration programs. A handful of small-scale demonstration programs show that while the language, literacy, and mathematics test scores of children participating versus not participating in preschool programs tend to converge as children progress through their K–12 schooling careers, the programs nonetheless appear to produce effects on a wide range of behavioral, health, and educational outcomes that persist into adulthood. The existing evidence pertains to low-income populations. The two most famous randomized experimental tests of preschool interventions with long-term outcome data—Perry Preschool and Abecedarian—provided striking evidence of this. Both programs produced large initial impacts on achievement test scores, but the size of these impacts fell in magnitude as children aged. Nonetheless, there were very large program effects on schooling attainment and earnings during adulthood.³⁶ The programs also produced striking results for criminal behavior; fully 60–70 percent of the dollar-value of the benefits to society generated by Perry Preschool come from impacts in reducing criminal behavior.³⁷ In Abecedarian, the treatment group’s rate of felony convictions or incarceration by age 21 is fully one-third below that of the control group.³⁸ There were other important effects as well, with reductions in teen pregnancy in both studies for treatment group members and reductions in tobacco use for treatment group members in Abecedarian.

Persistence of effects in programs at scale. Patterns of converging test scores but emerging impacts in adulthood are present in some other noteworthy preschool programs as well. These also focus on disadvantaged populations. For example, in studies of Head Start, there appear to be long-term gains in educational, behavioral and health outcomes even after test score impacts decline to zero. Specifically, a number of quasi-experimental studies of Head Start children who participated in the program in the 1960s, 1970s and 1980s find test score effects that are no longer statistically significant within a few years after the children leave the program. But even though Head Start participants have test scores that look similar to other children by early to mid-elementary school, these studies show that Head Start children wind up completing more years of schooling, earning more, being healthier, and (in at least some studies) may be less likely to engage in criminal behavior.³⁹ Two studies have examined the medium-term persistence of gains of publicly funded State pre-Kindergarten programs. One of these has followed children through third grade and found persistence of mathematics gains, but not reading gains, through third grade for boys.⁴⁰ The second study has followed children through first grade and has found convergence of participating and non-participating children’s cognitive skills and mixed impacts on children’s behavioral outcomes.⁴¹

Future Directions in Sustaining Short-Term Gains from Preschool. Despite several promising studies of long-term gains, we caution that the vast majority of preschool program evaluations have not included long-term followup. Strategies for sustaining short-term gains for children require more exploration and evaluation. One path to sustaining short-term gains may be to maximize the short-term impact, by ensuring that quality of preschool is high, according to the approaches described previously. Another is to work toward greater continuity in learning goals and approaches across the preschool and early elementary years by, for example, ensuring instructional quality and support for health and socio-emotional learning in kindergarten and the early elementary grades. And finally, efforts to bolster three major influences that parents have on children’s development—their psychological well-being; their parenting behaviors; and their economic security—have not often

been part of preschool education, but intensifying and further specifying these components may increase the impact of preschool. Recent advances in successful parenting interventions, which provide great specificity and intensive focus on the dimension of parenting targeted (e.g., specific behavior management approaches or contingent responsiveness), have yet to be integrated with preschool systems.⁴² A recent meta-analytic study suggests that a parenting-focused component can be an important complement to preschool and produce added gains in children's cognitive skills. The key is that the component on parenting be delivered via modeling of positive interactions or opportunities for practice with feedback. Didactic workshops or classes in which parents merely receive information about parenting strategies or practices appeared to produce no additive benefits beyond those from the early education component of preschool alone.⁴³ Efforts to integrate recent advances in adult education and workforce development programs (a new set of two- or dual-generation programs), similarly, are just now being evaluated.⁴⁴

PRESCHOOL'S EFFECTS FOR DIFFERENT SUBGROUPS

Family income. Recent evidence suggests that high-quality preschool positively contributes to the language, literacy, and mathematics skills growth of both low- and middle-income children, but has the greatest impact on children living in or near poverty. Until recently, it has been difficult to compare the effectiveness of high-quality preschool across income groups, because almost all of the earlier studies focused on programs that targeted children from poor families. For example, the median percentage of families in poverty in rigorous early childhood education evaluations identified in a recent meta-analysis was 91 percent.⁴⁵ One study from the 1980s of the positive impacts of preschool education on children from well-to-do families suggested substantial positive impacts on boys.⁴⁶ More recently, the advent of universal pre-K in a small number of States and communities has permitted comparisons based on income. In two studies of public pre-Kindergarten programs, positive and substantial impacts on language, literacy, and mathematics skills were obtained for both low- and middle-income children. In both of these studies, the impacts were larger for children living in or near poverty (as indicated by free-or reduced-lunch status), but still substantial for their less disadvantaged peers.⁴⁷

Race/ethnicity. Overall, the current research evidence suggests that children of different racial/ethnic groups benefit from preschool. Many of the most prominent evaluations from the 1960s, 1970s and 1980s (e.g., Perry, Abecedarian, and the Chicago Parent-Child Centers) focused on African-American students, with no comparisons of effects possible across different racial/ethnic groups. Several more recent studies have compared effects for students from different racial/ethnic backgrounds. The Head Start Impact Study reached somewhat different conclusions for 3-year-olds and 4-year-olds: for 3-year-olds, positive post-program impacts were strongest for African-Americans and Hispanics, relative to White, non-Hispanic children; for 4-year-olds, positive impacts were smaller for Hispanics, again relative to White, non-Hispanic children.⁴⁸ The Tulsa study found substantial improvements in school readiness for pre-Kindergarten participants from all racial and ethnic groups. Effect sizes were moderate to large for all racial and ethnic groups studied (white, black, Hispanic, Native American) but especially large for Hispanics.⁴⁹ The Boston study found substantial benefits in language, literacy, mathematics, and executive functioning domains for children from all racial and ethnic groups. Effect sizes were especially large for Hispanics and for Asian Americans, though the sample size for Asian Americans was relatively small.⁵⁰

Dual language learners and children of immigrants. Positive impacts of preschool can be as strong or stronger for dual language learners and children of immigrants, compared to their English-speaking or native-born counterparts. Given the specific challenges and opportunities faced in school by dual language learners (DLL)⁵¹ and the growing number of such students in the United States, it is important to know how high-quality preschool programs impact them in particular, as well as the features of quality that are important to their development. National non-experimental evidence suggests that positive effects of preschool on early reading and math achievement are as strong for children of immigrants as for children of the native-born.⁵² In the Tulsa pre-Kindergarten program, effects for Hispanic students who came from homes where Spanish was the primary spoken language (dual language learners) were larger than effects for Hispanic students who came from homes where English was the primary spoken language.⁵³ And the National Head Start Impact Study found significantly stronger positive impacts of Head Start on language and school performance at the end of

kindergarten for dual-language learners, relative to their native speaking counterparts.

Generally, the same features of quality that are important to the academic outcomes of monolingual English speaking children appear to be important to the development of DLL. However, a feature of early childhood settings that may be important specifically to the development of DLL is language of instruction. There is emerging research that preschool programs that systematically integrate both the children's home language and English language development promote achievement in the home language as well as English language development.⁵⁴ While there are no large meta-analytic studies of bilingual education in preschool, meta-analyses of bilingual education in elementary school and several experimental preschool studies have reached this conclusion.⁵⁵ Home language development does not appear to come at the cost of developing English language skills, but rather strengthens them. Thus, programs that intentionally use both languages can promote emergent bilingualism, a characteristic that may be valuable in later development.⁵⁶

Children with special needs. More rigorous research is needed on the effects of preschool on children with special needs (note that we do not discuss effects of preschool programs that serve only children with special needs). The Head Start Impact Study found that children with special needs randomly assigned to Head Start as 3-year-olds made significant gains in math and social-emotional development at the end of first grade compared to peers assigned to the control group.⁵⁷ Research on the Tulsa pre-K program found that children with special needs who participated in pre-K experienced significant improvements—comparable to those for typically developing children—in their reading skills and writing skills, though not necessarily in math. There is a need to test these patterns in other studies.

The benefits of quality preschool outweigh the costs.

High-quality preschool programs are one of many possible ways to support children's development, and it is important to ask whether the benefits from such programs can offset their considerable costs. Cost-benefit frameworks enable researchers to assess the value of social investments.⁵⁸ Key to this technique is a systematic accounting of the costs and benefits of an intervention, based on a careful comparison of outcomes for those individuals who participated in the program and otherwise similar individuals who did not. Early childhood education costs refer to all expenditures necessary to provide the program, including staff time and capital investments. Benefits typically take one of two forms. First, benefits may come from cost savings, such as reduced spending for special education and grade retention, as well as lower involvement in the child protection, welfare, and criminal justice systems. Second, benefits may flow from greater economic productivity, especially higher earnings as adults. It is also important to note that benefits can accrue not only to the individuals who directly participated in preschool programs, but also to society (e.g., the value of not being a crime victim). When both costs and benefits are quantified, researchers can produce an estimate of a program's benefits relative to its costs.

Rigorous efforts to estimate benefit/cost ratios of preschool have yielded very positive results, suggesting that early childhood education can be a wise financial investment. Using data on the long-term life outcomes of program participants and non-participants, assessments of the Perry Preschool program⁵⁹ and the Chicago Parent Child Centers⁶⁰ both yielded estimates of about 7 to 1 or higher. Estimates of the longer and thus more costly Abecedarian Project (program length of 5 years) have produced a lower estimate of approximately 2.5 to 1.⁶¹ Other scholars, lacking hard evidence on long-term impacts for program participants and non-participants who have not yet become adults, have made projections by blending evidence on short-term results from the program with evidence on the relationship between short-term results and adult outcomes from other sources. Such efforts have yielded estimates for universal pre-Kindergarten programs (available to children from all income groups) that range from 3 to 1 to 5 to 1.⁶² The divergence of estimates across programs suggests that it may be hard to predict the exact rate of return for programs. However, the best current evidence suggests that the impact of quality preschool per dollar spent on cognitive and achievement outcomes is larger than the average impact of other well-known educational interventions per dollar spent, such as class-size reductions in elementary schools.⁶³

The consistent finding of benefits that substantially exceed preschool program costs indicates that high-quality early childhood education programs are among the most cost-effective educational interventions and are likely to be profitable investments for society as a whole.

ENDNOTES

1. Among the Nation's 3-year-olds, 4 percent attend public pre-Kindergarten, 8 percent attend Head Start, and 3 percent attend special education preschool programs; National Institute on Early Education Research (2012). *The state of preschool 2012*. New Brunswick, NJ: Author.

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readiness: The Head Start REDI program. *Child Development*, 179, 1802–17; Clements, D.H., & Sarama, J. (2007b). Effects of a pre-school mathematics curriculum: Summative research on the Building Blocks project. *Journal for Research in Mathematics Education*, 38, 136–63; Preschool Curriculum Evaluation Research Consortium (2008). *Effects of Preschool Curriculum Programs on School Readiness (NCER 2008–2009)*. Washington, DC: National Center for Education Research, Institute of Education Sciences, U.S. Department of Education. Washington, DC: U.S. Government Printing Office.

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cational Effectiveness, Washington, DC.; Weiland, C., & Yoshikawa, H. (2013). Impacts of a pre-kindergarten program on children's mathematics, language, literacy, executive function, and emotional skills. *Child Development*.

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The CHAIRMAN. Thank you, Dr. Yoshikawa.
 Now we'll turn to Mr. White.
 Please proceed.

**STATEMENT OF JOHN WHITE, STATE SUPERINTENDENT FOR
LOUISIANA DEPARTMENT OF EDUCATION, BATON ROUGE, LA**

Mr. WHITE. Thank you. Chairman Harkin, Senator Alexander, and members of the committee, I thank you for the opportunity to speak with you today.

Early education can be life-changing for low-income children when it is done well and when quality is sustained in the grades that follow. In our State, we believe it is our responsibility, therefore, both to ensure that these options exist for families and to ensure that those supported with taxpayer dollars meet a minimum bar for quality.

In Louisiana, we believe that a quality education must be fostered by conditions in which quality thrives—high expectations, parental choice, skilled teachers. At present, the most prohibitive barrier in our State to achieving these conditions for young learners is the fragmentation of the early childhood education system.

Amidst a disjointed collage of early education programs and funding streams exist widely varying minimum standards for quality. Teachers' own educational backgrounds vary significantly from one program to the next. Professional development is a fact of life in some and nearly unheard of in others. And in almost every case, there is no requirement to coordinate the number of seats offered or the process by which parents choose those offers.

This fragmentation has a real impact on the development of children. In Louisiana, 46 percent of kindergartners start the year requiring intensive support in literacy. Tracing those kindergarten numbers back to 4-year-olds shows not only that children not enrolled as 4-year-olds suffer great deficits, but also that we have wide disparities in the extent to which early childhood centers are equipping those children who are enrolled as 4-year-olds with fundamental literacy skills.

In early 2012, our State set out to solve these issues of fragmentation. That year, Governor Bobby Jindal signed into law Act 3 calling for the creation of a statewide early childhood network bringing child care, Head Start, publicly funded pre-kindergarten, and publicly funded private pre-kindergarten under one system of enrollment, one system of minimum academic standards, and teacher preparation. Next and equally important, Act 3 called on the State board of education to take on the licensure of all programs involved in the fragmented collage.

In implementing Act 3, we realized two humbling but important lessons. First, each program's funding levels, teacher qualification requirements, and academic standards were tightly bound together. We could not raise one to a minimum standard without addressing the other. Next, the complexity of addressing these interconnected policies was compounded by the diversity of local settings in which these policies played out.

We thus called on communities to develop pilot networks of all program types around a set of core principles: unified enrollment and access for families; minimum academic and developmental standards, birth through five; and a basic standard of teacher effectiveness with equal access to professional development for teachers in all programs.

In the time since, the networks have instituted shared academic and developmental expectations in every classroom involved. They use the Teaching Strategies Gold assessment to measure child developmental progress. They use the CLASS evaluation system of child-teacher interaction to improve teacher practice.

Likewise, the networks have identified the number of children ages 0 to 5 who are eligible for publicly funded services in their parish. This year, they will collaborate in their admissions processes, offering parents unified applications to all programs along with coordinated outreach efforts to parents. This means that parents will have clear, comparable information in making their choices among all programs.

Having measured local families' demand for early childhood services, we're able to establish cost and revenue models for providing quality services in all programs. We can now set into motion changes to early childhood funding that would come into effect on the same timeline as would changes in teacher certification requirements.

The Federal Government can assist States like ours greatly in two ways. Congress can first support the growth of State-run programs that foster parental choice, minimum standards for teacher preparation, minimum quality expectations, and accountability when taking the public dollar. The subsidies in our State and most others are not yet adequate, not just to make choices available to parents, but also to provide for the conditions of quality choices.

Second, Congress can address the Federal Government's greater contribution to the fragmentation I described, Head Start and its regulations. That \$120 million of Federal funding annually skirts State-level input in Louisiana and virtually institutionalizes fragmented governance. States should have the opportunity to be Head Start grantees. In making this change, you will endorse the idea that families and taxpayers need not only greater access to early learning programs, but also a rational basis for choosing among those programs and a faith that government funding comes with a basic expectation of quality.

I thank you once again, Mr. Chairman and members of the committee, and I look forward to answering whatever questions you may have for me.

[The prepared statement of Mr. White follows:]

PREPARED STATEMENT OF JOHN WHITE

Chairman Harkin, Senator Alexander, members of the committee, I thank you for the opportunity to speak with you today. Louisiana's story reflects both the opportunities and the challenges in providing families access to quality early childhood care and education. A choice among quality early childhood options, especially for the most disadvantaged, while not a panacea for all challenges, is among the most effective tools we have for preparing children and parents alike for the challenges of the 21st century, and we must update our old ways to meet with this reality.

Our State knows its fair share of challenges. Two thirds of the 700,000 public school students in Louisiana receive federally subsidized lunches. Thirty-one percent of Louisiana's children live in poverty.

Louisianans know, however, that for our State's prosperity, and for the rights of our people to partake of the American dream, we cannot let these challenges predetermine our children's destinies. We have committed to making our education system one that offers opportunity to the next generation, and the results are encouraging. Louisiana students graduate at a rate 12 percent higher than just a decade ago. New Orleans, once the lowest performing school district in our State, now tops

the State's average high school graduation rate and, among African-Americans, tops the national average. In 2013 nearly 4,000 more Louisiana seniors than in 2012 achieved a college-going ACT score. And last year, Louisiana was the fastest growing State in the Nation in Advanced Placement participation and test passage.

Part of the reason for this progress is Louisiana's creation of State-funded pre-kindergarten programs, the "LA4" public school program and the Nonpublic Early Childhood Development Program (NSECD) private school program. Through a mix of State and Federal funds, LA4 and NSECD have served more than 100,000 4-year-old children since their inceptions. A University of Louisiana study recently validated that low-income students participating in these programs have shown significant, positive results through the 8th grade in not just literacy rates but also rates of student retention and special education referral.

Often the debate over investing in early childhood education comes down to study against study, each claiming an absolute truth about the effectiveness of an initiative that spans hundreds of thousands of young lives in disparate settings. I think—and our State proves—that it's time we get beyond this debate. Early education can be life changing for low-income children when it is done well, and when quality is sustained in the grades that follow. Done poorly, like anything else, its effects are limited. But done well, it is a potent arrow in the quivers of those fighting the effects of inequality and poverty.

It is therefore our responsibility, at the State and Federal level, both to ensure that those options exist for families, and to ensure that those we support with taxpayer dollars meet a minimum bar of quality.

In Louisiana, we believe promoting quality schooling starts with fostering an environment in which quality thrives: high expectations for student achievement and progress; parents who are able to choose the school option best suited for their children; and knowledgeable, skilled teachers who continue to learn and grow throughout their careers. We also know that if we are to offer quality choices accessible to all parents who seek them, we need simple, accessible enrollment processes and coordinated planning across often disconnected funding streams.

Government should be modest in its ambitions to influence the choices of parents and teachers, but government plays an important role in assuring these basic conditions for quality and for access.

The greatest barrier to achieving these conditions—no less than financial resources themselves—is the fragmentation of our country's early childhood education system. Consider that LA4, for all of its successes, serves fewer than 40 percent of low-income 4-year-olds in Louisiana. Districts use title I and State constitutional funds to provide another 25 percent of 4-year-olds with pre-kindergarten education. Head Start likewise serves 20 percent of 4-year-olds. Publicly funded child care centers and publicly funded NSECD private schools serve another 10 percent. A final 5 percent of 4-year-olds are not enrolled in any program.

Amidst this collage of education providers, governance structures, and funding streams are multiple definitions of a minimum standard of classroom quality and multiple sets of regulations determining how classrooms operate, including those imposed by the Federal Government through Head Start, which I will address toward the end of my testimony. Teachers' own educational backgrounds vary significantly; some programs require not even a high school degree, others full certification. Professional development is a fact of life in some, nearly unheard of in others. And in almost every case, there is no requirement to coordinate the number of seats offered or the process by which parents choose to enroll. While one center could have a mile-long waiting list, another nearby center could be enrolling families at only half of its capacity and never have access to families whose children are waiting at home for a wait list elsewhere to clear.

This fragmentation affects not only access but also quality. In Louisiana, we assess every kindergartner at the start of the school year for basic literacy skills. In spite of great progress, today 46 percent of kindergartners start the year requiring "intensive support" in literacy, the lowest score possible. Tracking those kindergarten numbers back to 4-year-old settings shows that we have wide disparities in the extent to which centers are equipping children with fundamental literacy skills.

Much as we have a challenge of fragmented access, we have an even greater challenge of fragmented effectiveness. That's not the fault of any one program or group. And it is not uncommon among States. But it is solvable, starting with ending the fragmentation that has characterized early childhood education governance for decades.

In early 2012, our State set out to do just that. That year Governor Bobby Jindal signed into law Act 3, passed unanimously by both houses of our State's legislature, calling on our State board of elementary and secondary education to take two steps.

First was the creation of a statewide early childhood network, bringing child care, Head Start, publicly funded private pre-schools, and public school pre-kindergartens under one system of enrollment, minimum academic standards, and teacher preparation. Next, and equally important, the legislature called on the State board to itself take on the governance of all programs involved in the fragmented collage and to assume responsibility for licensing organizations of all types that provide publicly funded early childhood services. Act 3 called for both mandates to be fully implemented across every parish in Louisiana by the 2015–16 school year.

In implementing Act 3, we realized early two humbling but important lessons. First, each program's funding levels, teacher qualification requirements, and academic standards were tightly bound together. We could not bring one up to a minimum standard without addressing the others. Next, the complexity of changing these interconnected policies was compounded by the diversity of local settings in which the policies played out: from the urban streets of New Orleans and Shreveport to the distant woods and bayous of our rural parishes.

The statewide network, we determined, would actually have to be comprised of dozens of local networks. And it would take multiple years to navigate the maze of funding, staffing, and academic requirements, bringing each to a consistent, minimum standard.

We decided that year to start by calling on the most committed among our communities to develop pilot networks of local providers around a set of core principles: unified enrollment and access for families; minimum academic and developmental standards, birth through five, with shared measurement of child development to guide the way; and a basic standard of teacher effectiveness with equal access to professional development for teachers in all program types. Each network was to include local school systems, local Head Start grantees, and multiple child care providers and private schools. We identified a local organization—a school system or a non-profit organization, most typically—to coordinate the network, and we began to develop the core functions of an Early Childhood Network, place by place. As we learned how it worked on the ground, we reasoned, we would return to the legislature and State board to make statewide policy on issues of funding, certification, and licensure.

Seventeen of our sixty-nine school systems were selected to participate in this first round of pilots. Another 15 are scheduled to join this spring. In the time since they have started, the networks have instituted shared academic and developmental expectations in every classroom involved. They use the Teaching Strategies Gold assessment to define developmental expectations and progress. They also use the Classroom Assessment Scoring System (CLASS) evaluation of child-teacher interaction to improve professional practice and to establish a shared language among professionals teaching in different programs. As a result, teachers in child care and Head Start programs are starting to regularly observe and be observed by teachers in private and public pre-kindergartens.

Likewise, the networks have taken responsibility for identifying the number of children ages 0 to 5 who are eligible for publicly funded education in their parishes, a large and important gap in such a fragmented system. This year they will collaborate in their admissions processes, offering parents unified applications to all programs, along with coordinated outreach efforts. In their second year, networks will go further, identifying enrollment targets for every school and center and operating a fully unified enrollment process. This means that parents will have clear, comparable information in making choices and, rather than driving from center to center hoping for a spot, will be able to rank all choices in one application. Coordination will enhance parental choice.

At the State level, we are able to learn from the networks prior to crafting statewide policy. Act 3 allows for a rolling policymaking process where the State works directly with practitioners to implement, and then returns to the State board and the legislature to make policy once we feel comfortable our conclusions are validated by work in the field.

While it has long been our vision to establish a higher minimum standard for the education backgrounds of our educators, for example, we knew early on that this would come at a cost and would have to accompany a change in funding. But we did not know then, for example, whether the fragmented system was offering too many unused seats or offered too few seats given the number of families eligible. Only after working with our pilot regions have we been able to create cost and revenue models indicating the funds needed for every child to have a teacher with at least an associate's or bachelor's degree. We can now set in motion changes to early childhood funding that would come into effect on the same timeline as would changes in teacher certification requirements. Likewise, in the year to come we plan to codify in law this coordinated local governance structure, giving diverse providers

a voice in local enrollment plans. And we will establish licensure standards that incorporate a center's ability to promote child development and kindergarten readiness. These steps are aimed at gradually closing the gaps of our State's fragmented early childhood system so that we can offer parents a choice of providers and a guarantee of a minimum standard of quality.

The Federal Government should maintain a modest role in this process. But it can assist States greatly in two ways. Congress can first support the growth of State-run programs that foster parental choice, minimum standards for teacher preparation, minimum quality expectations, and accountability when taking the public dollar. Second, Congress can address governance of the Federal Government's greatest contribution to the fragmentation, Head Start. While we are thrilled at the restoration of Head Start funding in the most recently passed budget, and while we appreciate greatly the contributions of Louisiana's Head Start providers, that \$120 million of Federal funding annually skirts State-level input in Louisiana virtually institutionalizes fragmentation and guarantees incoherence in access and quality for parents, teachers, and children alike. States that adopt strategies rooted in quality and access, eliminating redundancies, making all programs accessible to parents, and defining a minimum standard of quality, should have the opportunity to be Head Start grantees, to bring family eligibility and center operating requirements into line with expectations across the State's network, and to maximize Head Start dollars for families choosing such programs. In doing this, you will send a strong signal that families and taxpayers need not only greater access to early learning programs but also a rational basis for choosing among those programs and a faith that government funding comes with a basic expectation of quality.

I thank you once again, Mr. Chairman and members of the committee, for the opportunity to discuss these important issues, and I look forward to answering whatever questions you might have for me.

The CHAIRMAN. Very good. Thank you very much, Mr. White.
Now we'll turn to Ms. Ewen.

**STATEMENT OF DANIELLE EWEN, DIRECTOR OF THE OFFICE
OF EARLY CHILDHOOD EDUCATION, DISTRICT OF COLUMBIA
PUBLIC SCHOOLS, WASHINGTON, DC**

Ms. EWEN. Senator Harkin, Senator Alexander, and members of the committee, thank you for inviting me to present information today about the innovative approach to early childhood in place in the District of Columbia's public schools.

The growth of high-quality early childhood programs in DCPS and across the district is due to the leadership of Mayor Vincent Gray and Chancellor Kaya Henderson. Both have shown tremendous vision and dedication to ensure that young children at risk of school failure have access to the resources and supports they need to be successful.

I want to tell you the story of what we've done and share our results. In 2008, faced with declining graduation rates, low reading proficiency scores, large numbers of children living in homelessness and in poverty and near poverty, as well as a growth in the number of children with special needs and a rising number of children in language minority households, the city council and the mayor convened a working group to identify real solutions that could improve outcomes for all of our students.

The working group noted that high-quality early childhood programs can have significant benefits, but also that many children in DC who could benefit from these programs did not have access to them due to lack of space or ineligibility for Federal programs. As a result, the city passed the Pre-K Enhancement and Expansion Act in 2008 mandating universal pre-K for 3-year-olds and 4-year-olds.

This act extended the school funding formula to 3-year-olds and established a goal of making high-quality pre-K universally available within 5 years. Traditional public and charter schools began to incorporate 3- and 4-year-olds into their school plans to create 2-year early childhood programs. The act also invested in community-based providers as another component of universal access.

According to the National Institute for Early Education research, more than 90 percent of 4-year-olds and nearly 70 percent of 3-year-olds are now enrolled in pre-K in the district. There is an early childhood classroom in every District of Columbia Public Schools elementary school, meeting high-quality standards, including bachelor's degree teachers.

As a city, we have met our goal of universal access for 3- and 4-year-olds with families having a choice of traditional public schools, charter schools, or community-based providers. For us in DCPS, the implementation of the act was a critical turning point in our efforts to improve outcomes for our children, allowing us to ensure that those most at risk for school failure receive a comprehensive array of services to meet their needs, both for high-quality educational opportunities and for supports for healthy development.

We are now the largest single provider of services for 3- and 4-year-olds in DC. We achieved this through a partnership. In 2010, DCPS had many Head Start eligible families and other students needing early childhood education who we just could not serve. We designed a blended Head Start model to expand access and quality.

The Head Start model, like many blended funding models in school districts and community-based programs around the country, combines Head Start funds with local funding. The local dollars pay for teachers, aids, and other infrastructure costs, while the Head Start funds allow us to provide comprehensive supports to all families and coaching and other professional development for every teacher.

This approach allows us to provide the Head Start experience to nearly 5,000 children each day in neighborhood schools meeting title I eligibility. This is nearly three times the number served prior to implementing the model.

We have created a unified early childhood system where all classrooms provide the same quality, regardless of what the program is called. Specifically, every child in the Head Start model receives services that meet the Head Start standards, including screening and diagnostic assessment, high-quality classroom settings for the full school day and year using a research-based curriculum, and access to family support services.

While we are very pleased that a Federal review in 2011 found that we meet all Head Start standards in nearly 300 classrooms, we are most proud of raising the quality of education for all of our 3- and 4-year-olds in title I schools. Our data show that the model is working and helping our students to grow and to learn. In fact, children in kindergarten who attended pre-K in our program were found to have stronger pre-reading skills than their classmates who did not attend the program.

In addition, we have taken a closer look at what children are learning while in the Head Start model using the CLASS observa-

tion system, GOLD, and other measures. The results give us reasons to be very optimistic about our approach. We've learned that our youngest learners are gaining important pre-reading and math skills, as well as self-regulation and working memory skills. These results reaffirm our commitment to a high-quality, comprehensive approach that meets the needs of all students.

Because of the implementation of the Head Start model and the increase in the number of children and families we're reaching, we are truly excited for the future. We're proud of what our teachers and students have achieved, and we're committed to continuing to improve the quality of our programs so that every child has what he or she needs.

LaToya Smith, the parent of a pre-K student in DCPS agrees. She said,

"My child is at the Langdon Education Campus. Socially, he's thriving in a group of friends. Emotionally, he's maturing as a scholar who excels. Cognitively, he's secure in the basics. He's already learning to read! His teacher's goal is for him to be reading and writing by the end of the year. At home, he tells me about different cultures and continents. He speaks of space, astronauts, and the galaxy. He is so into learning and experiencing life, and I am happy for him and for us."

Thank you for having me today.

[The prepared statement of Ms. Ewen follows:]

PREPARED STATEMENT OF DANIELLE EWEN

SUMMARY

Senator Harkin, Senator Alexander and other committee members, thank you for inviting me to present information about the innovative approach to early childhood programming taken by the District of Columbia Public Schools (DCPS). DCPS is proud of what we have achieved.

The growth of high quality early childhood programming in DCPS and across the District of Columbia is due to the leadership of Mayor Vincent Gray and Chancellor Kaya Henderson. Both have shown tremendous vision and dedication to ensure that young children at-risk of school failure have access to the resources and supports they need to be successful.

In 2008, faced with declining graduation rates, low reading proficiency scores, large numbers of children living in poverty, and growth in the number of children with special needs and those from language minority households, the city council and the Mayor convened a working group to identify solutions to change outcomes for children.

As a result, the District of Columbia passed the Pre-K Act, mandating universal pre-K for 3- and 4-year-olds. This Act extended the Uniform Per-Student Funding Formula (UPSFF) to 3-year-olds, and established a goal of making high quality services universally available within 5 years. The Act also invested in the quality of community-based providers as another component of universal access.

For DCPS, the implementation of the Act was a critical turning point in our efforts to improve outcomes for our children, allowing us to bolster our commitment to ensure children most at-risk of school failure got a comprehensive array of services to meet their needs both for high quality educational opportunities and for supports for their healthy development. We are now both the largest single provider of services for 3- and 4-year-old children and of Head Start-eligible children in the District of Columbia.

In 2010, we designed the Head Start blended model, which is in all 57 "title I" elementary schools in DCPS. The Head Start model, like many blended funding models in school districts and community-based settings around the country, combines Head Start funds with local funding. In our case, the local funding comes through the Uniform Per-Student Funding Formula (UPSFF). The local dollars pay for teachers, aides and other infrastructure costs while the Head Start funds allow us to provide comprehensive supports for families and coaching and other profes-

sional development for teachers and to meet the Performance Standards. This approach allows DCPS to provide the Head Start experience to nearly 5,000 children each day in neighborhood schools meeting title I eligibility. Prior to the Head Start model, DCPS served 1,782 children.

With the blended model, we are able to provide high quality comprehensive services to many more children who can benefit, with the same level of grant funding. This has created a unified early childhood system where all children in our classrooms receive the same quality of programming regardless of whether the program is called Head Start or pre-kindergarten.

Every child in the Head Start model receives the services that meet Head Start standards, including screening and diagnostic assessment, high quality early childhood classroom settings for the full school-day and school-year, and access to family support services. And we are doing it well: in a Federal review in 2011, we were found to meet all standards.

We are excited that data show that our model is working and helping our students to grow and learn. New data show that in Kindergarten, children who attended pre-K at DCPS had stronger pre-reading skills than their classmates who did not attend the program.

I want to thank Senator Harkin and Senator Alexander for inviting me to present information about the innovative approach to early childhood programming taken by the District of Columbia Public Schools (DCPS). DCPS is proud of what we have achieved.

The growth of high quality early childhood programming in DCPS and across the District of Columbia is due to the leadership of Mayor Vincent Gray and Chancellor Kaya Henderson. Both have shown tremendous vision and dedication to ensure that young children at-risk of school failure have access to the resources and supports they need to be successful.

Today I am going to briefly outline the risk factors faced by young children in the District, describe our pre-kindergarten system, then focus on the blended funding model that has been implemented in DCPS, known as the Head Start School-Wide Model. Finally, I will share some exciting data on children's outcomes.

Research has documented the academic risk faced by children in poverty, and those risks are faced by thousands of District children. Despite the increase in median income over the past decade, 19 percent of the DC population continues to live below the Federal Poverty Level (FPL) (\$22,350 for a household of four), as compared to 15 percent nationally (IFF, 2012). District children are far more likely to live in poverty than adults: 15 percent of children ages 0–3 and 21 percent of children ages 3–5 live in extreme poverty (at or below 50 percent of FPL) while 26 percent of children ages 0–3 and 32 percent of children ages 3–5 live in families with incomes at or below 100 percent of the poverty line (Young Child Risk Calculator, 2012). Wards 5, 7 and 8 are most affected by child poverty and almost 60 percent of all young children in Ward 8 live in poverty. Wards 7 and 8 also have the highest unemployment rate, lowest median income, and the most children receiving TANF, or Temporary Assistance for Needy Families (DC Action for Child Kids Count, 2012b).

The National Center for Children in Poverty has noted that children who face three or more risk factors are the most likely to experience school failure and other negative outcomes, including maladaptive behavior. They define risk factors as low-income, single parent, teen mother, low parental education, unemployed parents, residential mobility (one or more move in last 12 months), households without English speakers, and large family size (families with more than four children) (Young Child Risk Calculator, 2012). Of children ages 3–5 in DC, 69 percent experience at least one risk factor; 40 percent experience one-to-two risk factors; and 29 percent experience three or more risk factors. In addition to experiencing a large number of risk factors, DC has the highest rate of children (17 percent) living in extreme poverty in a single-parent household compared to all other States.

These troubling statistics impact our success as a city; for example, nearly 4 in 10 students in DC schools do not graduate on time (NCES, Jan 2012).

In 2008 the city council and the Mayor convened a working group to identify solutions to change outcomes for children in the district. The working group noted first, that research has clearly documented the impact high quality early childhood programs have in increasing success for children at-risk, and second, that many children who could benefit from these programs did not have access to them.

As a result, in 2008, the District of Columbia passed the Pre-K Enactment and Expansion Act, mandating universal pre-K for 3- and 4-year-olds. This Act extended the Uniform Per-Student Funding Formula (UPSFF) to 3-year-olds, and established

a goal of making high quality services universally available within 5 years. The Act also invested in the quality of community-based providers as another component of universal access.

According to the District of Columbia Office of the State Superintendent for Education (OSSE), 70 percent of families with 3- or 4-year-old children have enrolled their children in full school-day and school-year programs in either DCPS or in a public charter school. There is now an early childhood classroom in every elementary school throughout the District, meeting quality standards including Bachelor's degreed teachers. Across the city, we have now achieved universal access for 3- and 4-year-olds, with families having a choice of traditional public schools, charter schools or community-based providers. DCPS is currently providing nearly half of all early childhood seats for 3- and 4-year old children in the District.

For DCPS, implementation of the Act was a critical turning point in our efforts to improve outcomes for our children. We are now both the largest single provider of services for 3- and 4-year-old children and of Head Start-eligible children in the District of Columbia.

The implementation of the Act also allowed us to be innovative in our approach. As a Head Start grantee, DCPS was already committed to ensuring our children most at-risk of school failure got a comprehensive array of services to meet their needs both for high quality educational opportunities and for supports for their healthy development. However, we did not have the resources to serve all Head Start eligible children.

To serve those children, in 2010, we designed the Head Start blended model, which is in all 57 "title I" elementary schools in DCPS. The Head Start model, like many blended funding models in school districts and community-based settings around the country, combines Head Start funds with local funding. In our case, the local funding comes through the Uniform Per-Student Funding Formula (UPSFF). The local dollars pay for teachers, aides and other infrastructure costs while the Head Start funds allow us to provide comprehensive supports for families and coaching and other professional development for teachers and to meet the Performance Standards. This approach allows DCPS to provide the Head Start experience to nearly 5,000 children each day in neighborhood schools meeting title I eligibility. Prior to the Head Start model, DCPS served 1,782 children.

With the blended model, we are able to provide high quality comprehensive services to many more children who can benefit, with the same level of grant funding. This has created a unified early childhood system where all children in our classrooms receive the same quality of programming regardless of whether the program is called Head Start or pre-kindergarten.

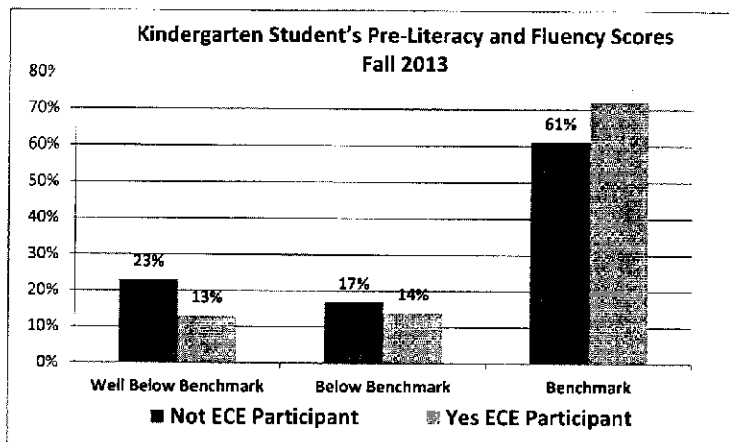
Every child in the Head start model receives the services that meet Head Start standards, including screening and diagnostic assessment, high quality early childhood classroom settings for the full school-day and school-year, and access to family support services. And we are doing it well: in a Federal review in 2011, we were found to meet all standards.

The program supports the needs of our families, and is also providing a warm, supportive environment that helps young students develop social and emotional skills. Children also develop academic skills and knowledge they need to succeed in Kindergarten. Each of our classrooms has at least two staff members, including a teacher and paraprofessional, so that students can learn in small groups and with one-on-one instruction and support. We require every teacher to have at least a Bachelor's Degree. Every classroom uses a research-based curriculum, and families can choose the school and curriculum that best meets their needs, whether it is Montessori, Reggio-Emilia, Tools of the Mind or Creative Curriculum. All early childhood staff receive extensive and regular professional development and training throughout the year. Paraprofessionals have been supported to gain their Child Development Associate (CDA) credential as well. Some of the key components of the Head Start model are:

- All early childhood classrooms in title I schools are fully supplied with high-quality early childhood materials and equipment in all content areas (literacy and language development, math, science/sensory, gross motor, art, drama, music/movement) that meet all children's specific development and learning needs.
- Every classroom has a teacher with a bachelor's degree and specialized training in early childhood who receive 8 days of professional development, weekly collaborative meetings with trained coaches to identify strengths and areas of improvement for teachers and aides and provide best practices, resource materials and peer-to-peer learning and individualized professional development through intensive coaching each quarter for teachers to meet identified goals and improve instructional practices.

- All classrooms in the Head Start-blended model use a research-based curricula that is aligned with the Office of the State Superintendent of Education (OSSE) Early Learning Standards (revised March 2013), the Head Start Child Development and Early Learning Framework and GOLD child assessment system, as well as with the Common Core standards.
- Inter-departmental and agency collaboration provides high-quality support to Dual Language Learners and students with special needs.
- Staff resources are dedicated to improving services and supports for children with special needs and to support teachers as they implement children's IEPs.
- Master's level mental health specialists provide individualized clinical services to children and families.
- Opportunities for family engagement in the school, classroom and at home while promoting parent education of child development through a comprehensive parent curriculum.
- Children from high-need families, especially those that are homeless or in foster care are supported on an as-needed basis through intensive case management and family outreach services.
- Assessment of health and dental needs of families, and partnerships with dental screening programs, school nurses, and local universities to provide dental, health and nutrition services to children and families.
- Participation in a universally free School Breakfast and the National School Lunch Program, meeting high nutrition standards.

We are excited that data show that together, these program components are working and helping our students to grow and learn. In fact, in Kindergarten, children who attended pre-K at DCPS had stronger pre-reading skills than their classmates who did not attend the program.



How are these skills measured?

The Dynamic Indicators of Basic Early Literacy Skills (DIBELS) is a reading instrument that helps teachers better understand their student's literacy needs. DIBELS testing is done three times a year. Teachers use the data from the tool to help monitor students' progress, guide literacy instruction and identify students who may need extra help.

DCPS is committed to providing a high quality program for all early learners. We use a number of assessments to gain a better understanding of what works for students and to be sure our classrooms are high quality. To help students learn and grow, DCPS uses classroom observations, teacher quality assessments, teacher evaluations and other measures of children. Our data show clearly that our programs meet benchmarks for quality and that our teachers and classrooms have the needed supports to help students do their best.

The DCPS early childhood program uses the Classroom Assessment Scoring System (CLASS), a widely used and researched tool that looks at the quality of the

classroom and how the teacher and students interact. When compared to other programs across the country where CLASS is widely used, DCPS programs are meeting national trends and the quality levels of other programs.

Additionally, our early childhood classroom teachers participate in the DCPS teacher evaluation system, known as IMPACT. In the 2012–13 school year, 82 percent of early childhood teachers were rated Effective or Highly Effective on the IMPACT teacher evaluation system. This means that most early childhood students have teachers who have been recognized and rewarded for their work. The IMPACT system also gives teachers opportunities to work with and learn from their peers, which ultimately leads to better instruction.

The DCPS early childhood program also looks at student's development and progress over the school year using a tool called Teaching Strategies GOLD. GOLD uses teacher observations to look at how a child is progressing to meet grade-level expectations in six developmental and content areas (see chart for a list of areas). We know that children are making progress throughout the year on this assessment, as 35 percent enter the year below these benchmarks and then make gains throughout the year. At the end of the last school year, 97 percent of our early childhood students met or exceeded the GOLD expectations for their grade-level. This means that most students finish the program with the skills needed to enter and succeed in Kindergarten.

In addition to GOLD, DCPS has taken a closer look at the classrooms in the HSSWM to examine the quality of the early childhood program at a deeper level. Students in those rooms are assessed using several measures that look at pre-reading, pre-math, problem solving, and social-emotional development. The results give us reasons to be very optimistic and very proud of our students. We've learned that our students are gaining important reading and math skills, as well as self-regulation and working memory skills. These results reaffirm our commitment to a high quality, comprehensive approach that meets the needs of all our students.

Because of the implementation of the blended model with Head Start and the number of students and families we are now reaching, we are truly excited for the future. We are proud of what our teachers and our students have achieved, and we are committed to continuing to improve the quality of our programs so that every child has what he or she needs to be successful.

But don't take my word for it. Here are the words of LaToya Smith, a parent at Langdon Education Campus:

My child is in a Montessori program, at Langdon Education Campus. Socially, he's thriving in a group of friends. Emotionally, he's maturing as a scholar who excels. Cognitively, he's secure in the basics (alphabet, counting, shapes, and colors). He's already learning to read! His teacher's goal is for him to be reading and writing sentences by the end of the year. At home, he tells me about different cultures and continents. He speaks of space, astronauts, and the galaxy. He is so into learning and experiencing life! And I'm happy for him, for us.

The CHAIRMAN. Thank you, Ms. Ewen.
Now we'll turn to Ms. Brantley.

STATEMENT OF CHARLOTTE M. BRANTLEY, PRESIDENT AND CEO OF CLAYTON EARLY LEARNING, DENVER, CO

Ms. BRANTLEY. Good morning, Chairman Harkin, Ranking Member Alexander, and members of the committee. I'm Charlotte Brantley, president and CEO of Clayton Early Learning in Denver, CO. Thank you for this opportunity to tell you about early learning initiatives in Colorado and how they align with the Clayton belief that all children are born with unlimited potential and our mission to ensure all children have access to a quality early education.

Clayton Early Learning is a nonprofit 501(c)(3) with a century of history providing vulnerable children with a good start. We provide exemplary early care and education services to more than 600 primarily low-income children, prenatal to age 5, while integrating as seamlessly as possible multiple State, Federal, and local funding streams.

All our program options, half-day, full-day, extended hours, home visiting, play and learn groups, are designed to give parents choices

and are all research-based, family-centered, comprehensive, and results-driven. Our statewide coaching and training services annually reach more than 2,500 early education teachers and leaders, impacting the quality of services for thousands of additional children across our State.

We have been an Early Head Start grantee since the late 1980s, in fact, before it was even called Early Head Start. We began offering Head Start in the mid-1990s and joined the nationwide Educare Learning Network in 2006. In 2010, we were named one of the first 10 National Centers of Excellence in Early Childhood by the Office of Head Start.

An ever-expanding body of research, as my colleagues have noted here, indicates that young children from disadvantaged homes start kindergarten lagging far behind their advantaged peers. This persistent gap, growing over time, is linked to illiteracy, teen pregnancy, high dropout rates, and unemployment. It may surprise you to learn that this gap is identifiable as early as 9 months of age in children's language development.

At Clayton Early Learning, we work to reverse this trend by helping to create a coordinated system of early learning, parent engagement, social-emotional development, and health and nutrition services to support all children becoming school-ready. We also work to join with our K–12 colleagues to create and maintain quality in their early elementary years.

Such a coordinated system is greatly facilitated by expanded opportunities to both increase and further leverage State, Federal, and public-private investments to link programs across the critical prenatal to age 5 period of rapid growth and development. We applaud efforts such as the introduction of the Strong Start for America's Children Act and the recent appropriation of \$500 million to create Early Head Start and Child Care partnerships.

State and local program practitioners are working very hard to ensure we reach more children who really need that support. But we can't do it alone.

The State level Colorado Preschool Program—and, Senator Harkin, maybe we can get that changed to the Colorado Early Learning Program. I'm with you there. CPP, as we call it, serves about 20,000 at-risk 3- and 4-year-old children each year, which represents approximately 14 to 15 percent of our eligible children, and 171 of 179 districts participate.

CPP encourages local districts to partner with community-based early childhood programs. And, in fact, 9 percent of the children are receiving CPP in a Head Start program, 23 percent are served in a community-based site, and 68 percent are served in the public schools.

Data shows that children who have had a CPP early childhood experience are still doing well as of fifth grade. They're scoring above their likely resourced peers who were not able to go to CPP as preschoolers.

Clayton Early Learning is fortunate to have a strong partnership with Denver Public Schools with just over 250 half-day preschool slots in our two schools under contract with DPS. Effective collaborations like these help create the systems to ensure children's success, and we support continued encouragement by policymakers of

such partnerships to leverage all early care and education resources available in local communities.

Colorado's Race to the Top early learning challenge grant will maximize a broader, coordinated set of State and local early childhood efforts to improve our workforce and the quality of settings, to measure and track outcomes, and to fully engage parents as partners. Our State Early Childhood Leadership Commission and network of local early childhood councils in partnership with our new Office of Early Childhood will oversee implementation of the grant.

We know that building these coordinated systems of education, health, nutrition, and family engagement will take concerted effort on the part of practitioners, policymakers, funders, families, and the public at large. And at Clayton, we are confident that as a nation, we can do it. As we aspire to achieve this goal, we must be careful not to over-complicate or to under-resource our strategies.

I thank you for your efforts and those being made by the States you represent, and I look forward to your questions.

Thank you.

[The prepared statement of Ms. Brantley follows:]

PREPARED STATEMENT OF CHARLOTTE M. BRANTLEY

SUMMARY

Good morning Chairman Harkin, Ranking Member Alexander and members of the committee. I am Charlotte Brantley, president and CEO, Clayton Early Learning in Denver, CO. Thank you for the opportunity to tell you about early learning initiatives in Colorado, and how they align with the Clayton mission to ensure all children have access to quality early education.

Clayton Early Learning is a non-profit 501(c)(3) with a century of history providing vulnerable children with a good start. We provide exemplary early care and education services to more than 600 primarily low-income children prenatally to age 5. All program options are research-based, family-centered, comprehensive, and results-driven. Our statewide coaching and training services reach more than 2,500 early education teachers and leaders every year, impacting the quality of services for thousands of additional children. We have been an Early Head Start grantee since the late 1980s, began offering Head Start in the mid-1990s and joined the nationwide Educare Learning Network in 2006. In 2010, we were named 1 of 10 national Centers of Excellence in Early Childhood by the U.S. DHHS, Office of Head Start.

An ever-expanding body of research indicates that young children from disadvantaged homes start kindergarten lagging far behind their more advantaged peers. This persistent gap, growing over time, is linked to illiteracy, teen pregnancy, high dropout rates, and unemployment. At Clayton Early Learning we work to reverse this trend by helping to create a coordinated system of early learning, parent engagement, social/emotional development, and health and nutrition services to support all children becoming "school-ready". Such a coordinated system is greatly facilitated by expanded opportunities to leverage Federal-State and public-private investments to link programs across the critical prenatal to age five period of rapid growth and development. We applaud efforts such as the introduction of the Strong Start for America's Children Act and the recent appropriation of \$500 million to create Early Head Start and Child care partnerships.

The Colorado Preschool Program (CPP) serves about 20,000 at-risk 3- and 4-year-old children each school year with 171 of 179 districts participating. CPP encourages school districts to partner with community-based early childhood programs. About 9 percent of the children are receiving CPP in a Head Start program, about 23 percent are served in a community-based site, and 68 percent are served in public school sites. Clayton Early Learning is fortunate to have a strong partnership with Denver Public Schools (DPS), with just over 250 half-day preschool slots in our two schools under contract with DPS. Effective collaborations like these create the systems to ensure children's success and we support continued encouragement by pol-

icymakers of such partnerships to leverage all early care and education resources available in local communities.

Colorado's Race to the Top Early Learning Challenge grant will maximize a broader, coordinated set of State and local early childhood efforts to improve our workforce and the quality of settings, measure and track outcomes, and fully engage parents as partners. Our State Early Childhood Leadership Commission and network of local Early Childhood Councils, in partnership with our Office of Early Childhood, will oversee implementation of the grant.

We know building these coordinated systems of education, health, nutrition, and family engagement will take concerted effort on the part of practitioners, policymakers, funders, families, and the public at large, and at Clayton we are confident that as a nation, we can do it. I thank you for your efforts, and those being made by the States you represent.

Good morning, Chairman Harkin, Ranking Member Alexander and members of the committee. My name is Charlotte Brantley; I am the president and CEO of Clayton Early Learning in Denver, CO. Thank you for the opportunity to share some exciting early learning developments in Colorado and shed some light on how these align with and support my organization's mission to ensure all Colorado children have access to a high quality early education.

Clayton Early Learning is a non-profit 501(c)(3) organization with more than a century of history providing vulnerable children with a good start toward success. Though we first opened our doors in 1911 as an orphanage and school for boys, our focus in today's world is on offering the highest quality early childhood education experiences and facilitating other providers to do the same. We currently provide exemplary early care and education services directly to more than 600 primarily low-income children prenatally to age 5. While we offer several different program options designed to give parents choices, all are research-based, family-centered, comprehensive, and results-driven.

We also work with many public and private partners including public schools, State agencies, higher education, health and mental health, and private funders to improve early learning systems throughout Colorado. Our statewide coaching and training services reach more than 2,500 early education teachers and leaders every year, impacting the quality of services for thousands of additional children. We have been an Early Head Start grantee since the late 1980s, began offering Head Start in the mid-1990s and joined the nationwide Educare Learning Network in 2006. In 2010, we were named 1 of 10 national Centers of Excellence in Early Childhood by the U.S. Department of Health and Human Services, Office of Head Start. I personally have been in the business of early childhood for more than 30 years, serving in academia, State and Federal program and policy administration, children's educational media, and local program operations.

An ever expanding body of research indicates that young children from disadvantaged homes start kindergarten lagging behind their more advantaged peers. We know this gap grows, continues into high school, and negatively impacts adulthood. It is linked to illiteracy, teen pregnancy, juvenile justice issues, high dropout rates, and unemployment.

Our ultimate goal at Clayton Early Learning is to reverse this discouraging trend. Child progress evaluations within our own programs make clear that learning gaps in the area of language development begin in infancy. If not addressed, this lag in early language development will later manifest itself as a lag in overall academic achievement. It is much more efficient to close these gaps very early, or prevent them from opening at all. Children and families, particularly those with multiple risk factors, need the support of a *coordinated system* of early learning, parent engagement, social/emotional development, and health and nutrition to be "school-ready" when it comes time to enter kindergarten. Component parts of such a system include:

- Professional development opportunities, matched with adequate wages, to build and retain high performing staff;
- Clear articulation of early learning standards and program guidelines, across funding streams and program approaches;
- Support for parents in helping their children acquire language, literacy skills, and problem-solving skills;
- Empowering parents to form networks and to reach their own aspirational goals;
- Supports for young children's progress toward healthy social/emotional development and self-regulation skills, including access to mental health services for both children and the adults in their lives; and

- Physical health and nutrition supports.

Creating and maintaining such a coordinated system is made possible by expanded opportunities to leverage Federal-State and public-private investments to support linkage of services and programs across the critical prenatal to age 5 period of children's rapid growth and development. We applaud related efforts such as the introduction of the Strong Start for America's Children Act and the recent appropriation of \$500 million to create Early Head Start and Child care partnerships.

Colorado is moving forward with an enhanced focus on improving and expanding access to early learning experiences for all our children. We recognize that we must do more to reach communities throughout our State. Our geographic and economic diversity (urban, rural, frontier) at times poses significant challenges in terms of service delivery. In addition, while many urban areas in Colorado have seen their child population grow, most rural communities across the State have experienced declines in child population, increasing the challenge of creating cost-effective ways to provide the same level of early learning services.

In 2011, children were the age group most likely to be living in poverty in Colorado. Unfortunately, children under the age of 6—whose brains are at the most critical developmental stages—are more likely to live in poverty than older children. In 2011, 21 percent of all Colorado children under 6 lived in poverty and more disturbing, since 2000 the number of young children living in poverty has increased by 136 percent. As you know, poverty is closely associated with challenges such as unstable housing, a lack of nutritious foods, and physical and mental health issues that can impact a child's ability to learn.¹ Furthermore, children affected by several adverse circumstances—three or more risk factors—are the most likely to experience school failure and other negative outcomes. An estimated 15 percent of children under the age of 6 experience multiple risk factors in CO (2011).²

State and local efforts are underway on several fronts to ensure we reach greater numbers of our children with high quality early learning experiences. Colorado's State-funded preschool program or CPP provides preschool for approximately 20,000 children each school year.³ The program serves mostly 3- and 4-year-olds that exhibit risk factors such as eligibility for free and reduced lunch, homelessness, drug abuse in the family, etc. Currently 171 out of 179 school districts participate plus the Charter School Institute. In many districts, local funds are added to what is available from the State to expand the number of children provided with a quality early education.

CPP leverages a mixed delivery model that encourages local school districts to partner with Head Start and community-based early childhood programs. Statewide, about 9 percent of the enrolled children are receiving CPP services embedded in a Head Start program, about 23 percent are served in a community-based partner site, while 68 percent are served within public school sites operated directly by the school district. Clayton Early Learning is fortunate to have a very strong and long-standing partnership with Denver Public Schools (DPS). Currently, we have just over 250 half-day preschool slots, funded with State and local district preschool funds, under contract with DPS.

Effective collaborations, such as those with school districts, create the systems to support children's success. We know first-hand that early childhood education at the community level through programs such as CPP strengthen the public-private partnerships between school districts, community-based programs, and Head Start programs. We fully support continued encouragement of such partnerships to leverage all of the early care and education resources in local communities to create high quality choices for parents to help their children succeed.

In Colorado we see that a quality preschool experience can have lasting effects into a child's K–12 academic career. For example, when compared to a matched cohort of students, children that participated in CPP continue to outperform their non-participant at-risk peers on State achievement measures, even into middle school. We are continuing to track CPP participants through high school. At Clayton Early Learning, we are also tracking our children's performance as they enter the K–12 system through our partnership with Denver Public Schools.

Last year, the Colorado State Legislature approved an additional 3,200 CPP slots (\$10M investment) through Colorado's annual school finance act. Despite these investments, however, we know we reach just 14 percent of eligible children in our State and have a long way to go. In addition, Colorado currently funds only half-day kindergarten and relies on individual parents or the taxpayers in each school district to cover the remaining cost of full-day kindergarten.

¹ KidsCount. Colorado Children's Campaign. Page 17, 57.

² NCCP "Investing in Young Children". Page 3.

³ CPP 2013 Legislative Report.

While we hope to see increased investments in our State's preschool program, CPP is just one funding source that contributes to our early learning landscape. Nurse Home Visiting Programs, Food Assistance, Child Care Assistance, Early Head Start and Head Start—all contribute to creating a more efficient and effective system to promote better child outcomes. In addition, several school districts and local city and county governments have significantly increased public funding available to support early childhood programs. For example, the sales tax-funded Denver Preschool Program recently enrolled the 25,000th child since the program's inception in 2006/2007. Summit County voters recently approved a ballot measure to extend a property tax levy supporting early childhood care and learning programs. Voters in Denver overwhelmingly approved an increase in local public school taxes in November 2012 that included significant expansion of preschool for 4-year-olds. At Clayton Early Learning we help our families access all funding streams for which they are eligible, and work to create a seamless integration within our program options.

Colorado is fortunate to receive a Race to the Top Early Learning Challenge grant of \$30 million and a supplemental grant of \$15 million over 4 years. This grant opportunity is setting in motion a number of initiatives to maximize a broader, coordinated set of State and local early childhood efforts supported by foundations, private companies, and the State.

Increasing kindergarten readiness is one of Colorado's top priorities, as we know it is a major milestone in a child's path to success. To accomplish this goal, Colorado's most at-risk children must have access to the kinds of high-quality early learning programs that will give them a great start. Major actions covered by the grant work plan include:

- Efficient and effective grant management and coordination, supported by the newly established Office of Early Childhood within the Colorado Department of Human Services.
- Communication to families, especially those with high needs, on all aspects of quality including the Early Learning and Development Guidelines, Tiered Quality Rating and Improvement System (TQRIS), and statewide online resources to increase ease of access to high quality programs.
- Supports to local early childhood councils to provide flexible, responsive support of grant activities at the local level.
- Grant evaluation per Federal specifications.
- Tracking Implementation of High-Quality, Accountable Programs.
 - Statewide implementation of the new TQRIS tied to child care licensing.
 - Training and communication to programs and providers on the new TQRIS.
 - Supports to increase quality, including local supports for shared services, especially for high-need programs.
 - Early Childhood Data System (ECDS) development including access and reporting for families, providers, and administrators.
- Promoting Early Learning and Development Outcomes for Children.
 - Development and dissemination of user-appropriate tools for programs, providers, and families.
 - Incorporation of Early Learning and Development Guidelines (ELDG) into the TQRIS, training and professional development, assessment training, and communications to communities and families.
- Ensuring a Great Early Childhood Education Workforce.
 - Unification of the State workforce competency system.
 - Alignment of teacher preparation programs (2 year and 4 year) around workforce competencies and promote articulation of coursework across all institutions.
 - Incorporation of competencies into statewide professional development opportunities.
 - Development of measurements for competencies in order to give credit for prior learning.
 - Provision of incentives and supports to advance through the ladder of competencies, especially for high-need providers.
 - Full deployment of a statewide Learning Management System (incorporating a workforce registry) to advance professional development opportunities to the early childhood education workforce.
- Measuring Outcomes and Progress.
 - Tiered expansion of the Results Matter program to track outcomes for more Children with high needs from birth through 5 years of age.

- Implementation of a kindergarten entry assessment for all children in all school districts statewide.

Throughout the work plan are two emphases: (1) the development of data systems and increased data sharing across programs and departments for continuous quality improvement, and (2) an increased emphasis on educating and empowering families so they can best support the optimal development of their children and become effective advocates when needed. Starting with the new Office of Early Childhood, through smarter management of grant activities and a new emphasis on empowering and educating families, these efforts will constitute a comprehensive evolution in the State's push for quality early learning programs. Together, these accomplishments will enable Colorado to achieve significant increases in overall kindergarten readiness as well as major decreases in the gap in readiness between children with high needs and their peers.

In 2013 our Governor-appointed Early Childhood Leadership Commission was re-authorized by the State legislature. This body of 20 individuals represents business, State agencies, parents, early childhood program providers, Head Start and private foundation leaders. A key component of its charter is to advise the Office of Early Childhood and other relevant State offices on implementation of all aspects of the Race to the Top Early Learning Challenge grant work plan.

Colorado established a system of local early childhood councils many years ago, and expanded their numbers in recent years to create statewide coverage. These local councils are charged with identifying the best ways to facilitate local coordination among programs and services serving children and their families. In addition, they are often the conduit for moving funding and other supports targeted to improving quality down to the local grass roots level. In many cases they have also successfully increased local investments in early childhood programming.

Establishing and maintaining this State and local leadership infrastructure is critical to ensuring we are leveraging our public investments to their utmost potential, better able to monitor child outcomes, and continuously improve the vital supports that serve our youngest and most vulnerable learners.

Clayton Early Learning leadership staff serve as members of the Governor-appointed State Commission and the local Denver Council. We strongly believe it is our obligation to take part in the early childhood quality and access improvement work at all levels and to share what we learn through our own demonstration programs.

In conclusion, I would like to encourage you to continue thinking about how we as a nation want to invest in our future. The work I get to do every day sends me home feeling very good, and not just because little children are so satisfying to be around. At Clayton Early Learning, we believe that all children are born with unlimited potential, and that all parents want the best for their children. As I was beginning a tour of our Educare School one day for a research physician in Colorado who is also a Head Start graduate, I mentioned that the children we serve are often destined to never finish high school unless we do something, now. He looked across the group of preschool children before us on the playground and replied, "Yes, and you never know which one will cure cancer, given the opportunity." This is about giving all our children the opportunity to enjoy life every day while a young child, see themselves as a successful learner, and to become a contributor to the greater good as they grow up. We know this will take concerted effort on the part of practitioners, policymakers, funders, families, and the public at large, and at Clayton we are confident that as a Nation, we can do it.

I thank you for your efforts, and those being made by the States you represent.

The CHAIRMAN. Thank you very much, Ms. Brantley.

Thank you all for your statements and for your written statements, also. We'll start a round of 5-minute questions here.

Let me just ask this at the outset. Have you all taken a look at the bill that I introduced in November called the Strong Start for America's Children Act? Is that something that you've kind of looked at? OK. Here's my question. What's wrong with it?

Dr. Yoshikawa, what's wrong with it? What needs to be done? What am I missing? What needs to be better focused on? Obviously, we're just starting this whole process, and I'd like to know—do you see any gaps in there, anything that you think we should focus on stronger than something else?

Mr. YOSHIKAWA. I appreciated the emphasis on quality. I think—and I'm going to stick to my expertise here, which is not so much the financing or those kinds of aspects of a system like this. But I appreciated the emphasis on quality. I think there could be perhaps even greater specificity on what that actually means and how to support it.

I think there were some emphases in there on issues like coaching. Certainly, our review shows that there are now multiple choices, and programs can be given a choice of particular skills they would like to strengthen in their programs, whether these are language and literacy, math, or socio-emotional development. So we have, luckily, strong and proven curricula in each of these domains that can be paired with this kind of coaching or mentoring model.

So I think maybe some further thought could be given to the supports for learning and the critical role of curricula, which, again, are not push-down kinds of instructional models, but are designed for children this age. These are activities that children enjoy. They're play-based, but they're focused to improve children's skills. And maybe there, there could be a bit more guidance.

The CHAIRMAN. OK. Good.

Mr. White, you focused a lot in your testimony, written and spoken, about the role of the States. So in our legislation—my bill, anyway—we have a lot of co-sponsors on—and that is to set up Federal-State partnerships to work on this. Is there anything that you could advise us on that you think we should change or modify or emphasize more?

Mr. WHITE. Thank you, Senator. I would just reemphasize what I said in my testimony, which is that I don't think the idea of additional Federal funding—and additional funding is needed for the size of subsidies that exist across the programs that we manage in Louisiana. But I don't think that there is a dichotomy between that—and also the idea of making the most and, frankly, making sense of preexisting funding streams.

I would encourage any legislation to—and I recognize Head Start has to be reauthorized and such, and this is a matter of process—but to take a look at the wide plurality of funding streams. And even if we are adding additional funding streams or asking States to match Federal funding, to allow States greater fungibility of those dollars so that we can actually address questions of classroom quality and questions of basic minimum standards as well as questions of access in unison, offering families multiple options with an assurance of quality.

If we don't solve for that fragmentation, I worry that we will just create additional layers of complexity for government that will end up resulting in some of the, frankly, inconsistent outcomes that we see. The inconsistent outcomes that we see in our State when kids come into kindergarten are not just because kids didn't attend a program prior to kindergarten. It has very much to do with the differences in quality among those programs they attended. Solving for that problem is a critical aspect of any legislation.

The CHAIRMAN. Well, that's what Dr. Yoshikawa talked about. All right.

Ms. Ewen, is there anything that you think we should be looking at?

Ms. EWEN. I'm not sure I'm going to say anything different. But I would emphasize the quality piece. I would emphasize the need for stability of resources to programs. Programs cannot provide high quality if they don't have the level of resources needed to pay for quality, and that's a key piece of what you've put on the table.

The CHAIRMAN. I have to interject here. All my years I've been here looking at Head Start programs and things, the problem has been getting good qualified people to run and to teach at Head Start programs. But that costs more money.

Ms. EWEN. It costs more money. That exactly right.

The CHAIRMAN. Costs more money. If you want quality, you've got to pay for it.

Ms. EWEN. And you need a stable source of that funding. It's not just making sure the dollars come in and out. It's that you can rely on the funding that you have so you can build a program like Charlotte and I have described.

The CHAIRMAN. Yes.

Ms. EWEN. And the third thing I would just say is I think the focus, while it is on preschool, is making sure that you still have the capacity to serve children birth to five and to build a quality system for all children, because as you started with, children need high quality from the moment they enter an early childhood program.

The CHAIRMAN. Ms. Brantley, same question. You looked at it. Is there anything that we need to focus on differently?

Ms. BRANTLEY. I think there's a couple of comments I would make. One is that I think the language in it around supporting the idea that these services, No. 1, as my colleagues have all said, are high quality, high quality, high quality—and, yes, it does cost. I think we have to be honest for once about that cost.

I think that it's very strong in the language around—that these services can be offered in multiple places. There's not one set idea of where it gets offered. But it can be offered in community-based settings. It can be offered on public school campuses and can be offered in multiple sites. I think that's very strong.

The other thing I would simply say is that while I firmly believe that we need to partner State, Federal, and private people who are interested in partnering in this, and I think that's all good, and incentivizing all that is wonderful, I am concerned about the sustainability over time when the Federal money gets pulled back and pulled back and pulled back over time. And what will happen—some States are better resourced than others to take care of those things, and sometimes unforeseen circumstances come your way, like the flooding that happened in my State.

This year, our Governor has just announced that we need another \$3 billion just to fix our roads and our infrastructure because of what was destroyed in flooding last year. So you just never know exactly, and we want to be sure that as we move forward with this, we don't set it up in such a way that when money is needed for something else, it gets taken away from our kids.

The CHAIRMAN. Thank you all very much. My time has run out. Senator Alexander.

Senator ALEXANDER. Thanks, Mr. Chairman.

Ms. Brantley and then Mr. White, I want to ask you the same question and first make an observation, especially with the chairman of the Budget Committee and the Appropriations Committee here. I come from a State where the Governor yesterday announced that in Tennessee, community college attendance would be free for any student who wanted to go; and a State where since 2005, early childhood education has expanded in all 95 counties.

So States are moving ahead. But what's most difficult for them is when Medicaid spending goes from 8 percent of the State budget to 30 percent, or in the Federal budget, when we look down the road 10 years and see mandatory entitlement spending going up 80 percent. That squeezes out of the Federal budget and the State budget the dollars that we'd like to invest in early childhood education. So that observation just needs to be made.

The Centers of Excellence, of which Denver is one, was a bipartisan compromise that came up in 2007 when the House passed President Bush's proposal to basically block grant Head Start to the States. And the idea was that this fragmentation—and there's this 18 billion Federal dollars, there's State dollars, there's local dollars—that it might be useful for a period of 4 or 5 years to allow Governors to designate and the department to pick cities that were doing the best job of coordinating all these fragmented programs.

We only appropriated \$2 million and only designated 10 centers. But, Ms. Brantley, what could we do to improve that Centers of Excellence program based on your experience as being one of those 10?

Ms. BRANTLEY. I appreciate the question, Senator Alexander. We at Clayton Early Learning have been very fortunate to have been selected in that first round, and we were 1 of the first 10 and did receive the funding. We have 1 year of funding left.

Senator ALEXANDER. What did you get, about \$200,000?

Ms. BRANTLEY. Two-hundred thousand dollars a year over 5 years. We're in the fourth year of that funding. We have one more year to go. We will receive a final payment in September of this year for another \$200,000. It has allowed us to deepen some of our most promising practices, particularly around working with teachers in all sorts of early childhood settings.

We have spent quite a bit of our time working on that around the coaching services, and once we add coaching to the professional development model, sending teachers—more and more of them are going out and getting their A.A. degrees and now getting their B.A. degrees.

Senator ALEXANDER. Is there anything we can do—I only have a couple of minutes left. Is there anything we could do to improve it or change it or make it more useful?

Ms. BRANTLEY. I think giving more opportunities for those Centers of Excellence that have been funded to come together and to have opportunities to share what they're learning throughout the network would be helpful. There's a little bit of that beginning to go on, but we would like to see more of it.

Senator ALEXANDER. If you have any other suggestions, would you send them to me in writing after this is over? I'd be very interested in those.

Ms. BRANTLEY. Yes, sir. I'd be happy to do that.

Senator ALEXANDER. Mr. White, you mentioned fragmentation and allowing the State to be a Head Start grantee. We had a pretty big argument about that in 2007 when President Bush recommended and the House passed a block grant to States. But it's a little different proposal to allow the State of Louisiana to be a Head Start grantee.

Do you have anything to say about the Centers of Excellence idea as a way of encouraging or promising the practice of coordination of fragmented programs? Or do you want to elaborate at all on your suggestion that the State might be a Head Start grantee and why that might be better received today than a similar proposal was a few years ago?

Mr. WHITE. It's a question of access and a question of quality. And we, as a country, seem to be rallying around both of those questions. But you can't claim to be providing full access and full choice when you have separate centers, separate funding streams, separate sets of regulations that literally require no coordination in the offering of seats even within the same neighborhood to parents who reside in that neighborhood.

So allowing for one system of governance—

Senator ALEXANDER. Well, would the best way to do that be—you'd almost have to coordinate that locally, wouldn't you, in order to make it work?

Mr. WHITE. Yes. But as you pointed out, and has been pointed out throughout today's testimony, much of the funding comes from the States. Most of the funding is coordinated through the States. If we're choosing to work as we typically do in education through the States as the governing entity, the State can essentially enfranchise locals, as we do with the K-12 system, to distribute funds and to coordinate enrollment through the local system. But the State is the governing entity. And insofar as there are funding streams that work around that, it's greatly debilitating to both questions of access in a neighborhood and questions of quality and defining it.

I would say at the same time regarding the Centers of Excellence that if we're going to stick with that strategy, getting serious about the regulatory consistency between Head Start and other pre-K programs, no matter how we do the funding, is important. I talk every day with school superintendents who themselves—and I commend the administration—could take advantage of the opportunity themselves to be Head Start grantees but don't, partially because the regulatory burden is so significant and, frankly, so different from what it is in the funds that they typically receive for early childhood services.

Senator ALEXANDER. Thank you.

The CHAIRMAN. I have Senator Mikulski, Senator Scott, Senator Franken, Senator Isakson, Senator Murray, Senator Casey.

Senator Mikulski.

STATEMENT OF SENATOR MIKULSKI

Senator MIKULSKI. Thank you very much, Mr. Chairman, for having this hearing and such a wonderful panel.

I'm going to get right to what I think we need. I'm not so sure we need new programs. I know this might surprise everybody, be-

cause I'm a good Democrat. I don't know if we need a new program, but what I am convinced of is that we need a new commitment to early childhood education.

Head Start was created almost 50 years ago. It was one of the building blocks that President Johnson wanted in the war on poverty. My first job after getting my master's in social work was to be a social worker in a Head Start program—and for those of us who were in those programs, we were so excited, because we saw Head Start as one of the keys to helping our children move out of poverty because we knew how important it is.

Forty-eight years of experience with Head Start and we are still having these kinds of discussions. So, I say we need a real commitment. I'm going to get to my questions, but I just want to make a few more comments.

We need to build on existing programs, like Head Start and the Child Care Development Block Grant program that Senator Burr and I have been working on to reauthorize—on a bipartisan basis, and ready for the floor. We did a great job in appropriations. Head Start is now funded at \$8.6 billion. We added a billion dollars, and that was decided on a bipartisan basis. The Child Care Development Block Grant—again, we increased that—that's now funded at \$2.3 billion.

So, we have some of the building blocks. What we need to do is build on best practices, provide local flexibility, and look at the reality. Everything that I've read in your testimony and listened very carefully to—all of these programs have qualified people with bachelor's degree working in them. Yet the average pay for a preschool teacher is about between \$32,000 and \$38,000.

Yet, a teacher at a high school can make \$30,000 more. This is stunning. We need to be able to look at that. So as we work on this, we need to make the highest and best use of what we have, which takes me to my question to you, Mr. White.

You've spoken about fragmentation and this coordinating council that was established in Louisiana. And congratulations for that. Would you recommend that as we move ahead with whatever we want to do—the reauthorization of Head Start, the creation of a new program—that we encourage States to establish councils and coordinating mechanisms like that to get highest and best use of existing programs?

Mr. WHITE. I would encourage that any levying of Federal dollars—

Senator MIKULSKI. And should we mandate those councils?

Mr. WHITE. I would say that States should develop plans that have three principles embedded: No. 1, a basic minimum standard of quality; No. 2, a plan to ensure that teachers are capable of delivering that quality; and, No. 3, a plan to maximize the variety of choices and the funding streams that come with them. In Louisiana, in our State, that happens to come through the parish level.

However, in a State like New York, where I previously worked, that has more than 900 school systems, you can imagine a different local structure. If we don't get to the question of how these funding streams interrelate with each other, as I believe, Senator, you're hinting at, we'll never—

Senator MIKULSKI. I'm not hinting at it. I'm pretty definite about it.

Mr. WHITE. Yes, ma'am. We're never going to get the quality—

Senator MIKULSKI. I really do think we have to make use of existing programs and have them work together.

Mr. WHITE. But if I can highlight some of the points you're making around teacher pay, yes, it's a \$28,000, \$29,000, \$30,000 question maybe for some of the pre-kindergarten teachers. In our State, it's often a minimum wage question for a child care educator.

If we don't address, thus, the relationship of the child care subsidy to the Head Start subsidy to the pre-K subsidy into one uniform system of funding that's somehow determined not at a level across 300 million people, but more of a level across 4 million people, as in my State, we will never be able to develop policies complex enough, nuanced enough to address the fact that a minimum wage educator today is what we are asking to provide a world-class standard of public education for 3- and 4-year-olds.

Senator MIKULSKI. I think that's great. You also said \$120 million of Louisiana money skirts the State.

Mr. WHITE. Correct.

Senator MIKULSKI. What is that? Is that the faith-based programs?

Mr. WHITE. Those are the Head Start dollars that we're spending on 3- and 4-year-olds.

Senator MIKULSKI. So how does that skirt the State?

Mr. WHITE. Well, insofar as the relationship is directly between a grantee, in our State, at the parish level, and the Federal Government, the regulatory structure is outside of it, the funding structure, and I think probably most important for these purposes, the enrollment structure is outside of it. And this is critical to understand, and you mentioned it with the networks.

So long as we're talking about maximizing dollars and maximizing choice and access for families, we cannot continue to have families driving around whatever jurisdiction they live in, dropping off applications at 17 different places whose admission processes don't speak to one another. This is a fundamental problem of governance. We won't make best use of taxpayer dollars, but we also won't be able to establish minimum standards if we don't solve it.

Senator MIKULSKI. If you could flesh that out and get those ideas to us, I would appreciate it.

Mr. WHITE. I would be happy to do that.

Senator MIKULSKI. Thank you very much.

There are many questions for all of you, but I appreciate it. My time is up.

The CHAIRMAN. Thank you, Senator Mikulski.

Senator Scott.

STATEMENT OF SENATOR SCOTT

Senator SCOTT. Thank you, Mr. Chairman.

I'd like to say thank you to the panel for your commitment to America's children. It is, without question, that each and every one of you has a desire to see our Nation flourish. And, without question, it seems to me that you all understand the importance of

early childhood development, and your commitment to it is certainly to be acknowledged. So I appreciate that.

To build on what Senator Mikulski spoke about, building on our existing programs, seems to be very important. Taking on the task of looking to build a new program to put on top of all the other existing programs in order for us to reach more kids doesn't seem like the best approach.

Mr. White, I'll ask you this first question. How can Congress ensure that the large number of Federal early childhood programs, each with different levels of rules and regulations, is not making it more difficult for low-income families to access the opportunities to have their kids in the programs?

Mr. WHITE. As some of my fellow panelists have hinted at, the distinctions between an urban environment like Denver or a rural environment in Colorado, Louisiana, or anywhere else are so vast that there is no way to do choice planning and enrollment planning other than that at the local level. And there is no way to do regulatory planning other than through one entity, and I believe that should be the States.

The States should empower locals to ensure that there is equal access and choice. And the way that, thus, the Federal-State relationship should be is the Federal should say to States,

"We know that you're different. We know that your contacts are different. Your current funding situations are different. Your current regulatory situations are different. Thus, our job is to respond to your plan and to help support a State's plan rather to impose a new set of regulations or a new set of funding streams that allows for less coherence that already exists today."

Senator SCOTT. Thank you.

Ms. Brantley or Mr. White, we talk a lot about parental involvement and the importance of parental involvement. And it seems like the maze that we currently have, really, for a parent, makes it more difficult to understand and appreciate the resources that they may have access to.

What would you, Ms. Brantley, suggest that we could do to help States and perhaps community providers help their parents understand the complexity of the system?

Ms. BRANTLEY. Thank you for that question, Senator Scott. You know, I think there's a lot of traction being gained at the State level and sometimes at the community level in working to combine these programs, despite some of the issues that can make that difficult, but trying to really do it from a parent's perspective or from the child's perspective so that they're coming into a program and don't have to worry about the multiple funding streams that might be behind it.

Colorado has a State statute that was passed a couple of years ago that we're making progress on now to create a universal application for multiple programs. We intend to include Head Start in that, although, as my colleague here, Mr. White, is pointing out, you have to sort of do that on a grantee by grantee opt-in basis. But we are getting traction with that in our State, because there's been a lot of conversation at the State level about that.

So I think in terms of the Federal role, sometimes just even paving the way by having Federal agencies putting out information memoranda that point out to States the flexibility they might actually have that they haven't taken advantage of in some of those kinds of things, is quite useful.

Senator SCOTT. Thank you.

Would any other panelists like to touch on that question?

Ms. EWEN. I think that there are, as Charlotte said, lots of ways that we can build on the existing flexibility to help States and local government agencies assist families, and that it's not about this program and that program, because when you look at the few early childhood programs that there are that are serving our families, for the most part, they are under-resourced, and there's just not enough out there.

It's not that we have so many different programs that families have umpteen different choices. The problem is that families don't have choice. There's not enough high-quality programming available. At the State level and at the local government level, we can help families find the best door for them, and we can pave the way. But, ultimately, we have to invest in quality programs so that every family that needs a space has one.

Senator SCOTT. Thank you.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you. I just might add—and I'm going to keep adding this—quality costs money.

Ms. EWEN. I'll keep saying it, too.

The CHAIRMAN. All right. Thank you.

Senator Franken.

STATEMENT OF SENATOR FRANKEN

Senator FRANKEN. Thank you, Mr. Chairman, for this hearing. I hope it's the beginning of a number of these, because I, along with Senator Mikulski—and it sounds like pretty much everybody here—really believe in the return on investment of early childhood education, quality early childhood education. Yes, quality costs money.

In Minnesota, we won a Race to the Top grant, and it's helpful. But we still only cover about a quarter of the kids that qualify, and that's a shame. I want to ask Dr. Yoshikawa—and anyone can weigh in—about the evidence on return on investment.

I know that the first study on early childhood—or I guess one of the first—was the Perry school, and it showed at first these positive gains in IQ, but then the fade-out phenomenon at third grade. And that seemed to be grabbed onto by people who were opponents of early childhood.

But then we learned, as that Perry study continued and studies since, that we have these other benefits that come—better health outcomes, fewer kids being left back a grade, fewer kids being in special ed, fewer pregnancies in adolescence, more graduation from high school, higher earning, less imprisonment, less crime—and that the estimates, in your testimony, are as high as \$7 of return for every dollar. Is that right?

Mr. YOSHIKAWA. The estimates are \$7 for small-scale demonstration programs like the Perry Preschool. For larger-scale programs,

they get a bit lower. But these are still substantial returns on investment. The range is \$3 to \$7 across large-scale programs like the Chicago Parent Child Centers, like the Tulsa universal pre-kindergarten program, ranging up to \$7 for the Perry Preschool.

I'm glad you mentioned this issue of fade-out, because we know that there is this convergence of test scores. Test scores is much of what we have during the elementary and junior high school years, for example. And there, often, the kids who did not get exposure to preschool catch up. But we know that test scores are not the only indicator of children's development.

There are medium-term impacts on special education grade referrals, and, in addition, these long-term societal impacts on things like reduced crime, reduced teen pregnancy. We're just starting to understand what these factors are that might explain some of these very important long-term outcomes.

Senator FRANKEN. We do have to understand that, and we're also understanding that there are certain non-cognitive abilities or talents or characteristics that really determine success maybe more than the cognitive factor, and that maybe that has something to do with it. And we'll learn about that in the research.

I really want to emphasize parents. I introduced a bill last year, the Parent Education and Family Engagement in Education Act, to expand parent engagement. Parents are the first teachers. And just to anyone on the panel, can you elaborate on the impact of parent engagement on preschool learning and outcomes?

Mr. YOSHIKAWA. From our meta-analysis of 84 studies of rigorous preschool, we looked at the added impact of parenting education components in early education programs. And we looked at two types, one type that provided didactic workshop information to parents about children and about parenting—

Senator FRANKEN. That was less successful.

Mr. YOSHIKAWA. That was less successful than the type that actually offered opportunities for practice and skill building. So parents and children together with a skilled facilitator engaging in this process of observation and feedback—that doubled the effects on children's skills above and beyond the effect of preschool alone.

Senator FRANKEN. Mr. Chairman, my time is up. But I also want to just say—since Senator Mikulski talked about the pay of preschool teachers and early childhood teachers—if we're going to get quality, we have to have good teachers, and we have to have workforce improvement for those who are going to be in the classroom with our little children who are only—you're only three once. That's my last word. You're only three once.

The CHAIRMAN. I think that's probably true.

[Laughter.]

Senator FRANKEN. Well, it depends on your whole theory of cosmology and religion and—

The CHAIRMAN. Stop.

Senator FRANKEN. I'll stop.

The CHAIRMAN. Senator Isakson.

STATEMENT OF SENATOR ISAKSON

Senator ISAKSON. Thank you, Mr. Chairman. I commend Senator Franken on focusing on parental involvement. When I chaired the

Board of Education in Georgia, I used to be asked if attention deficit disorder, ADD, was the biggest learning disability, and I said, "No, it's parental deficit disorder."

We don't have enough parents involved with their kids to really give higher expectations, and, therefore, a lot of our kids fall and drop out. So I commend your focus on parental involvement. It's extremely important.

Mr. White, you're a young man, so you're going to live a long time and be head of the school system for a long time. I want to ask you a longitudinal question about this proposal on early childhood.

The President's recommendation to the States that would be eligible for the grants would be that the first year, the State would have to match the cost by 10 cents on the dollar. But by year 10, it would have to have 300 percent match. In other words, slowly but surely, over a decade, from the time you started the program until 10 years later, you would take over the full cost.

Understanding the financial challenges that Louisiana and every State has in public education today, could you take on an initial challenge today that you knew was going to cost you 300 percent more in 10 years of State funds?

Mr. WHITE. Senator, for better or for worse, I'm not the one who makes the financial decisions in our State. It, obviously, would be a significant consideration. I suppose I would encourage, however, the committee and the Congress to understand that, No. 1, we're not making the most use of the dollars that we have today, but, No. 2, that our modeling shows that even if we did, we would not be able to pay for a truly highly qualified teacher providing a world class education for every child or to make that available to every child.

So I don't believe that those two things are dichotomous. We have to make better use of the dollars that we have, and at the same time, the money has to come from somewhere. The Federal Government working with States can play a helpful role in that, but States clearly need to be secure in their own financial position if it's to happen.

Senator ISAKSON. So you agree with Senator Mikulski. I happen to agree, too. We've got to take the existing programs and make them better rather than trying to recreate the wheel all over again? Is that—

Mr. WHITE. I do believe that we need to fix the current fragmented framework, yes. And I also believe that there are States like your own, Senator, that have stepped up and made this a real priority of their volition, and I commend them for doing that.

But I don't want to totally discount the fact that the Federal Government can be helpful to States like mine. I just think it's a matter of not drawing these lines of dichotomy, making sure we've got what we have right, and accepting on the other hand that the current subsidy levels, no matter where the money is coming from, are not adequate, and it's urgent that we fix it.

Senator ISAKSON. You worked in the State of New York for a while, correct?

Mr. WHITE. Yes, sir.

Senator ISAKSON. And now you're in Louisiana. There are tremendous differences in terms of the challenges in those two States, are there not?

Mr. WHITE. I'm reminded of this on a daily basis.

Senator ISAKSON. That's why when we try and do Federal programs, sometimes we try to write a prescriptive program. I was reading in the briefing book here about the conditions on the Federal funding, which is to qualify for funding, States must first meet Federal benchmarks for early learning standards, teacher quality certification, training and compensation comparable to K-12 staff, comprehensive data and assessment systems, comprehensive health and related services, small class size, and low adult-to-child ratios.

If you get into that prescriptive of a requirement on the money you're sending to the State, it's going to turn off the State from asking for the money. Would you agree with that?

Mr. WHITE. Yes, sir, I would. I do think it's important that as we talk about quality, we understand that quality is a question of the principal or the head of the center, the teacher, the parent, and the child. The question is how do we put those individuals in the best position to learn and to develop, and not to recreate mistakes we've made in the K-12 system out of our ambitions for quality.

I agree with you, Senator, that those plans can come from the ground up. But imposing them from the top down is not the best approach.

Senator ISAKSON. Thank you very much. And I appreciate your recognition of our State. The guy that beat me for Governor of Georgia, Zell Miller, who is now one of my closest personal friends, did our State a great service when he passed the Georgia lottery and constitutionally dedicated the money to 4-year-old pre-kindergarten for all children eligible, to technology, and to a full college scholarship for anybody graduating from a Georgia high school with a B average.

That's been a great program. We now invest \$300 million a year on 82,386 students in our pre-K program. It's a great one and a real testimony to Zell Miller.

Thank you, Mr. Chairman.

The CHAIRMAN. By the way, I'll say to my friend from Georgia that our bill is different from the President's. I hope you recognize that. We started out with a 10 percent, and it goes to 100 percent. But it never goes above that, in other words, equal, and it never goes above—

Senator ISAKSON. Your bill is the best one.

[Laughter.]

The CHAIRMAN. Thank you. We're looking for you to sign on to the bill.

Senator Murray.

STATEMENT OF SENATOR MURRAY

Senator MURRAY. Thank you very much, Mr. Chairman and Senator Alexander, for holding this hearing today. I think everyone knows that early childhood education is near and dear to my heart.

As the only former—what we used to call preschool teacher, now early learning teacher, but former preschool teacher, I know first-

hand what this research really confirms. And it is such an important investment and focus that our country needs to take on. I know, as well as everybody, that when a young learner gets the attention they need, they start off kindergarten on stronger footing.

What I have really come to respect as I've gone around my State to talk to people about our effort to expand early learning to all kids in this country, is who has come to be the most visible beside me. It has been our business owners, because they know they need workers. It is the sheriffs, because, as Senator Franken talked about, they know who is in their jails today, but, most surprisingly, our military leaders, because they know that the quality of the recruits that we need for security for our country in the future depends on this.

Do you know that, today, 75 percent of the Americans who apply to go into the military are ineligible because of health and academic shortfalls? That is a threat to our national security as well. So I think this focus on early learning is extremely important.

I'm delighted to see a number of city and State governments who are looking at this. The *New York Times* said that Michigan and Alabama have increased their investments in pre-kindergarten. Republican Governor Rick Snyder said those investments, "will show up for decades to come."

This, to me, is something that parents are behind, teachers are behind, communities are behind, the military is behind, law enforcement is behind, and I think Congress needs to get behind it. I really appreciate your attention on this, and I appreciate the bill that you have offered, the Strong Start for America's Children Act that you mentioned earlier.

So far, we don't have any Republican co-sponsors. I'm looking forward to hearing what their ideas are and to them joining us in this effort along with so many other people in America.

With that, let me just focus on a couple of questions. As I said, I travel all over my State. I talk to so many people about the importance of early learning, and yet what I hear from families is story after story after story about waiting lists for child care or pre-school.

So, Ms. Ewen, you talked about this, and I'd like for you to focus on it a little bit more. It isn't just a matter of who's managing it or how it's streamlined. It really is access for these people. What are the barriers for these families to getting into early learning opportunities?

Ms. EWEN. In DCPS, we do not have any barriers. We offer the pre-K program in the neighborhood school. Families register through the lottery in the same way they do for a seat in kindergarten or first grade. Right now, we have universal access across the city.

Senator MURRAY. So do all children attend?

Ms. EWEN. We have available space for all families. Sometimes they have to travel a little bit. They look for different things. We have choice. So their neighborhood school may not have the program they want. They may want a Montessori program, and so they look for that program in a different school. But we do have enough space for all the children between DC public schools, the charters, and the community-based providers.

Senator MURRAY. What is your percentage of attendance?

Ms. EWEN. Across the city, we have 90 percent of our 4-year-olds and 70 percent of our 3-year-olds who are currently enrolled.

Senator MURRAY. This is quite different, Mr. Chairman, than most of the Nation. In a lot of the Nation, 80 percent of the kids who enter kindergarten have not had any early learning experiences.

Ms. EWEN. And one of the things that we've done is we've really eliminated—we do all the back work to make sure that families are eligible, that they are where they need to be. Families just go where they want to go. They don't have to say, "Hey, I have to put a piece of paper here and here and here." We've made the spaces available throughout the city at the kind of providers they want.

Senator MURRAY. Ms. Brantley, are there barriers? Do you have a 90 percent rate? Where are you?

Ms. BRANTLEY. I would love to be able to say we have the same thing that DC public schools have. We do not yet in Colorado. I think that we—under-resourced is, I think, my favorite expression right now.

We have some really high-quality programs. We know that they are effective. We simply don't have enough money in them to serve everybody, whether it's the State preschool program, which, by the way, can be used birth to five in certain school districts. But we certainly don't have enough money in the child care assistance program. Head Start, we already know—Early Head Start—none of those are funded to the point where 100 percent of the eligible children can be served.

As we work to combine these funding streams locally into high-quality programs, it does help a little bit, because families can stay in with different funding streams as they sort of ebb and flow in and out of their eligibility processes. But at the end of the day, you have a waiting list, because there simply are not enough dollars in the system to fund everybody across the board in the way that they've managed to do in the preschool by combining Head Start and preschool, as I understand is in DC public schools.

Senator MURRAY. My time is up. But, Mr. Chairman, I know that we use words here that don't mean a lot. When I heard one of our panelists—I think it was Mr. White—talk about the wide disparity of kids entering school today from those who have had some kind of early learning, and they don't—let me translate that for you. As a kindergarten teacher said to me, three-quarters of her kids come without any early learning and do not know how to turn a page in a book or hold a pencil. That is a huge disparity when you are a child starting out in kindergarten.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Murray.
Senator Casey.

STATEMENT OF SENATOR CASEY

Senator CASEY. Mr. Chairman, thank you very much.

I want to thank the panel. I appreciate your testimony and your personal witness. I was in and out so I missed some of the dialog.

This is an issue that I think for a lot of us has commanded not just our attention, but I think our passion and our focus for a long

time. And I know virtually every member of this panel and others have made it a priority. I think we're starting to make progress. We have Senator Harkin's bill, the Strong Start for America's Children legislation, which is gaining significant momentum now and support. The House has a comparable measure.

I think when you get right down to it, it's, obviously, the right thing to do for our children, but it's also the right thing to do for all of us, because all the data shows—and it's irrefutable now—that this is a critically important part of economic growth, gross domestic product, skill development, workforce development. Almost anything we can talk about that relates to our economy has its origin in early learning.

I like to say if kids learn more now, they'll earn more later. It's a nice rhyme, but it actually is true, unlike some rhymes around here, I guess.

But one part of the support structure for this—and it's been substantial. I saw it in Pennsylvania, going back even more than a decade, as support was building. The support from the business community has been remarkable and I believe essential. So we've gotten tremendous support from across the board. You can't talk to many CEOs of major companies or even smaller firms that don't agree with it.

But for those who have not been persuaded yet, what would you say to them? Maybe I'll start with Ms. Brantley just to talk about—and anyone else on the panel—your interaction with business leaders and the priority they place on early learning as a way to build a stronger workforce and a stronger economy.

Ms. BRANTLEY. A group of business leaders in Colorado formed an organization in the last few years called EPIC, Executives Partnering to Invest in Children, who are working collaboratively with those of us in the direct practitioner world, the advocacy community, and others to try to build more of that understanding among business leaders throughout our State about the importance of this.

One of the things that I find very interesting about them is that—and, Senator Franken, this is kind of coming back to something you mentioned earlier—they don't focus so much on the child's academic outcomes as they do on children's—what we call sometimes now in the field—executive functioning skills, being able to take turns, being able to wait for delayed gratification, being able to set goals and achieve them, being able to simply show up on time and be there and control yourself and take care of your own needs, and also being able to take someone else's viewpoint into account. They focus on that a lot more.

We find that our District Attorney in Denver also focuses on that a lot. He will say that without those skills, you show up in his world. With those skills, you show up in a successful business person's world as an adult.

It's an interesting additional conversation that we are able to have with those business leaders who really can dig down into what it is that a high-quality early learning program needs to set children on a path toward, and that it's not just their academic outcomes. It's also their outcomes as a person, as an individual who

can function well in our society. It brings a little bit of a different tone to the conversation.

Mr. YOSHIKAWA. If I could add a little bit on that, the Boston universal pre-K program, in addition to producing the largest vocabulary and math impacts of any public pre-K evaluation to date, also affected all three dimensions—there are three dimensions of what Ms. Brantley was talking about around executive function skills.

But I'd like to highlight that we do have these very serious access problems so that children are not getting access. Sixty-five percent of 4-year-olds in the bottom 40 percent of this country are attending preschool. And in comparison, 90 percent of the top 20 percent as far as income—90 percent of those kids get access to these rich experiences. So I'm not sure 200 or 300 Centers of Excellence really meet the demand that we need, that our economy needs in the 21st century.

Senator CASEY. I only have about 15 seconds, but if you both can comment quickly, that would be great.

Ms. EWEN. I am a champion fast talker. I would add to what Charlotte has said, that in addition to building the case for the workforce for the future, the stability of an early childhood system today means that business leaders have staff that are going to be able to come to work every day, that are going to be reliably at work, and that feel comfortable being at work because they know their children are safe and well cared for, as well as building the workforce for the future. This is a reform strategy that strengthens our capacity to have better graduates who have higher skills throughout their lifetimes.

Senator CASEY. Thank you.

Mr. White.

Mr. WHITE. I would only add on a different spin on this question that tax credits that exist from one State to the next, including corporate tax credits for child care subsidies, are also an important part of the financing structure and are more reason why we should allow States to design their own funding regimes rather than continuing to manage a portfolio of 10 or 20 different programs.

Senator CASEY. I'll have some questions for the record. But thank you very much.

The CHAIRMAN. Thank you, Senator Casey.

Ms. Ewen, I had my staff look at, and they've informed me—I maybe need to go out and get a little hands-on look at this, too. But I think what you've accomplished in the District of Columbia is quite astonishing, quite frankly, how you've put all these entities together. There's a couple or three things I want to just have a dialog with you on.

You relied on facilities of traditional and charter elementary schools. In other States, however, they've gone outside the school system, such as Head Start agencies and other community-based providers. If that were the case, are there any lessons that you've learned that could be carried over to that type of an implementation, where you might go outside the system?

Second, you suggested that a Head Start blended model was critical. Now, this is new to me. We always thought of Head Start as serving low-income kids. They're sort of segregated out. What you

did was put them in with everybody else. I'd like to know how you've done that. And what has been the reactions of parents who would be ineligible for Head Start because of income? How do they feel about their kids being in that program with kids who are eligible?

Those are two things I just wanted you to address yourself to.

Ms. EWEN. I am happy to address that. I first want to make sure that I don't get all of the congratulations, because it really took the leadership of the city to do what we did and people coming together with a combined vision.

To your first question, I do think it is critical to have community-based providers as part of what we're doing. The 2008 bill that we passed in the city included funding to improve the quality and the capacity of the community-based providers in addition to building the school funding formula so that we could serve 3s and 4s in the school buildings.

So it really is a matter of committing to all the places where families might want to go and need to go for a variety of reasons. As I said earlier, some families have a different choice of the kind of program model they want, but some—

The CHAIRMAN. But I think you just stated within the existing school structure.

Ms. EWEN. Most of it is in the school structure now. But we do still have some community-based providers.

The CHAIRMAN. Oh, you do?

Ms. EWEN. Yes, and I do think it's critically important that we have those community providers, because some families still need 10 to 12 hours of care because of the nature of their work or other issues in their family. But most of our kids are in either traditional public schools or in the charters, because our funding comes through the school funding formula. But we make sure that community providers are part of the act, that they're part of the approach to universal.

We're lucky in that we had space in our schools to do this. Many communities don't have that space. In New York City schools, for instance, they don't have extra space, and so community providers have to be a part of that equation.

But what we've seen across the country is that there is the capacity to do partnering between community providers and local school buildings and local school districts when folks come to the table together. Charlotte has seen this in her community. We've seen it in other places around the country. We see it in Georgia. We see it in New Jersey with the Abbott program.

We see lots of opportunities for folks to partner to make sure that families are not the ones that have to answer the question, that we as a community can say, "We have a range of options for you." But it started with the funding, and then we went to how can we do this appropriately. So that's an answer to your first question.

Your second question about mixed income—

The CHAIRMAN. Blending, yes.

Ms. EWEN. That's actually one of my favorite things to talk about, so I'm glad you asked. When we looked at who wasn't getting services, it was both Head Start eligible families and families who were making maybe a dollar more. When we talk about our

mixed income, it's not just poor and higher income. It's extremely poor, it's poor, it's near poor, it's low income under 200 percent, and then we have some higher income families as well.

One of our challenges was why are we providing Head Start services through one door when you have a family who needs exactly the same things who can't get in that door. That's one of the things we tried to address with the model.

The second thing we addressed is that you cannot look at a family or look at an income number on a piece of paper and know what that family needs. And all the research from early childhood shows that it's not just high-quality teachers that make a difference or an educational option. It's making sure the family has that comprehensive set of supports.

Again, it's not about "You live in poverty, so you need family services. And you don't live in poverty, and you don't need anything else." All of our children need to be assessed developmentally to make sure that we can get them the supports they need early so that if they need early intervention, we can get them that. We need to know that families have what they need to make sure their children are healthy, that they have a medical home, as Senator Alexander mentioned. All families need those supports.

What we find when we look at where our families are is that families are coming to our schools. They're not saying, "I'm not going to go there because that's a poor school." Families come to our programs because they're high quality and they're providing early childhood experiences that families want, regardless of income, and they enroll their kids.

They see this as part of the school experience, and they enroll their kids, regardless of whether the child sitting next to their kid is poor or not. We have a system where everybody comes.

The CHAIRMAN. And you didn't run into any real problems with that?

Ms. EWEN. We didn't run into any problems in terms of people saying, "I'm not going to go to that school because that's a poor school or that's Head Start." A lot of that was in the language used, I will say, in what we did with the Pre-K Expansion Act. We took a lot of the labels off.

Again, we, behind the scenes, deal with those labels and deal with those funding streams. We say, "This is school. This is pre-K. This is where your child is going to go this year." So we don't put that burden on families to identify where they need to go or what it's called.

The CHAIRMAN. Thank you.

Senator Alexander.

Senator ALEXANDER. I want to go back to the issue that has been brought up by many of you and many Senators, which is fragmentation. I want to discuss it in a way that does not exclude whatever need there is for additional subsidies either from State or Federal Government.

I should add that Senator Murray—I'm sorry, she left. She said she hadn't heard a Republican proposal. Well, I'm a Republican, and I made a proposal. But I didn't want it to be thought of as a Republican proposal. I was hoping that we could take the Head Start Centers of Excellence idea and fully implement it, which

would mean go from 10 to 200 centers recommended by the Governors and selected by the secretary, and then fully fund it, which would be to go from \$10 million to \$100 million.

Mr. White, let me ask you this. The whole idea of that in 2007 was to try to address the fragmentation issue that we've talked about. But as I listen to you, you're not able to really do that with just—because you have Federal laws and rules, and no one has the authority to coordinate the various programs. I mean, you can't just identify, let's say, all the 3- and 4-year-olds in Baton Rouge, and then take all the Federal, State, local, and private money available for early childhood education in Baton Rouge, and then create a comprehensive program to address the needs of those children.

I know there are like 45 Federal programs, but only 12 of them are most of the money, and then Head Start and the Child Care and Development Block Grant are most of that. So could you envision a way where we could at least create pilot programs, such as these 200 centers, and say, "Louisiana, you can take two or four jurisdictions"—the State can—and working with a local jurisdiction, you can override all the Federal rules and come up with your own plan for how to spend all the money you can assemble for all the early learners in that jurisdiction.

Could you envision that? Sometimes it's better if we start off with pilot programs than if we just make a change that affects this entire complicated country at one time. We usually don't have enough wisdom to do that here.

What's your comment on how we—could we advance the Head Start Centers of Excellence idea with more authority and, in doing so, make it easier to do what we had hoped to do, or at least I had hoped to do, which is to identify all the children, identify all the dollars, and put it together in the most effective way?

Mr. WHITE. I think you'd find willing participants in Louisiana, most certainly, Senator, and I would hope across the country. I believe the principles that you're advancing are exactly the right principles with respect to cutting out the fragmentation.

I actually believe in their own ways that the Washington example and the Denver example are very good instances in which we've cut out the eligibility—or we've minimized the results of the fragmentation on eligibility for parents and families, on the operating rules, and on the size of the subsidy, and we've just asked, "What's best for the child?"

Senator ALEXANDER. But in Denver, you have to do a lot of negotiating to get that done, right? I mean, for example, if you want to involve Head Start in your universal application form, you've got to persuade them to do that. Is that correct?

Ms. BRANTLEY. Persuade, invite, encourage them to do that, yes. But we think that we're making a lot of progress on that. I think that, as John has pointed out, there are so many different masters in charge of all of these different programs.

Senator ALEXANDER. Yes.

Ms. BRANTLEY. It can be done. I think what you see that has been done in DC, what you see has been done in our program in Denver—there are some other programs in Colorado that have successfully navigated those things. So it can be done. I think that the

potential for the new Early Head Start-Child Care partnerships may help us to pave the way to a bit more of what you're talking about.

Senator ALEXANDER. But you know the number of 3- and 4-year-olds in Denver, right? I mean, that's a definite.

Ms. BRANTLEY. Right.

Senator ALEXANDER. And you probably know pretty well the total amount of money in all the programs that are available to help them. Is that correct?

Ms. BRANTLEY. Yes.

Senator ALEXANDER. But you've just got a lot of different people in charge of all those dollars.

Ms. BRANTLEY. Well, it's the way that this field has grown up, with multiple funding streams and with multiple people. However, you can at a community level—when there is the desire at the community level to pull those pieces together, you can, in fact, do it. But you have to have people who are pretty conversant in what each one of those is requiring.

At Clayton Early Learning, what we have decided to do is to take the high road, and whatever the highest quality piece of—a regulatory model or whatever it might be that comes from any one of our funding streams, we aim for that one so that we are at the highest point of each one of those. So it can, in fact, be done.

Senator ALEXANDER. Thank you, Mr. Chairman.

The CHAIRMAN. Senator Warren.

STATEMENT OF SENATOR WARREN

Senator WARREN. Thank you, Mr. Chairman. I think I'm going to followup on the same point that Senator Alexander was making, but from a little different perspective.

It's clear to me that our country needs a strong early childhood education system. Investments in our children are investments in the future. And that's why I'm pleased to join President Obama and Chairman Harkin and so many others in the push for substantial increases to investment in early education.

Research shows that the payoff from these investments is greatest when the early education programs are of high quality. So if we want to increase investments in early education, we need to be very careful that we're investing only in high-quality models.

Now, we can try to ensure quality from the outset by using certain conditions, like class size or a well-designed curriculum. But we also need to have a way to determine whether we're making the right investments. So what are the metrics that we should be tracking to determine whether States are investing in practices and programs that work? Anyone—who would like to answer this?

Dr. Yoshikawa.

Mr. YOSHIKAWA. Head Start has made progress on that, as you know, in the last reauthorization by instituting a progress monitoring tool, the CLASS classroom assessment, which Mr. White also mentioned is being used in Louisiana. So taking the pulse of a system's quality is extraordinarily important. This is not about high stakes assessments that are then tied to hiring and firing decisions. But this is about how systems have done this at scale.

In the research world, I think we very much value pilot programs, but only in situations where we really don't know what to do. We now know how to implement high-quality preschool at scale across entire States, like Oklahoma. So I think we're far beyond the point of pilot programs, given the scale of the need of young children in this country.

Senator WARREN. Could I ask you to say, Dr. Yoshikawa, just for all of us, a little bit about the kinds of data that are tracked so that we're assuring ourselves that we're spending our money in the right places?

Mr. YOSHIKAWA. Sure. The CLASS assessment, for example, is observational. So it is not about what's typically done, which is a supervisor coming in and checking only class size or group ratios or those kinds of things. It actually gets at the quality of interactions between teachers and children related to instruction, related to classroom management, related to their ability to be responsive in their interactions with children. That's the aspect of quality that matters a great deal for children's learning.

Senator WARREN. Good. Thank you.

I have another question I want to ask, and that is about preparing the workforce. There seems to be a growing consensus that better-educated teachers are critical to building a high-quality pre-kindergarten program. But I think there are still some big questions about how we get there and who is going to pay for it.

Increasingly, State and Federal policymakers are considering measures to require preschool teachers to get at least some college training. Proposed legislation often says that teachers should have early childhood degrees or be in a related field. But the content of these teacher preparation programs vary, and there seems to be an opportunity to improve these preparation programs if we can be more specific about what we need from them.

So I want to start by asking what the research on early childhood education tells us about the kinds of skills that teachers need to be effective in the classroom.

Ms. Ewen, did you want to answer on that? Or anyone.

Ms. EWEN. I'll let Dr. Yoshikawa start.

Senator WARREN. OK. Good.

Mr. YOSHIKAWA. Qualifications are important. One of the ways that they're important in issues like compensation is that we have a terrible situation with the average pay of preschool teachers. Teaching children 1 or 2 years older can double your salary. So we have enormous teacher turnover, which is not good for stable systems, and it's not good for child development.

The approaches to improving teacher skills in the classroom, which include this structured curriculum plus the coaching and mentoring in the classroom, have been proven with teachers with a variety of qualifications and skill levels, including child care providers, Head Start teachers, as well as B.A.-level public pre-K teachers. So, again, we know how to create high quality tailored to different skill and qualification levels of the teacher and caregiver workforce.

Senator WARREN. Ms. Ewen.

Ms. EWEN. The only thing I would add is that we look to teachers who are strong on instructional support, that is, they know how to

talk to children to scaffold their learning, to ask higher order questions of children to build their vocabulary. We look to them for emotional support of children's full range of development, and we look to make sure that teachers are prepared to use the classroom environment to support how children learn, that is, centers, play areas, those kinds of things.

We find that B.A. degree teachers with early child experience are critical to that, as is a second adult in the room with early childhood experience. But we also need that ongoing coaching and professional development, because teachers need a lot of help in managing the individual children that they get.

We're getting many more children with special needs. We're getting many children from language minority backgrounds. And those things may well be taught in college environments, but teachers need the help and support they can get on a daily and weekly basis to build those skills.

Senator WARREN. I think Ms. Brantley wanted to add something.

Ms. BRANTLEY. Just to build on what has already been said, some of the things we're also learning is that our teacher preparation programs, as you pointed out, aren't necessarily hitting the mark, either, yet. And we have a lot going on with that in Colorado right now with a new set of core competencies for early childhood professionals that we are now working to embed within college course work and mirroring it with coaching, actually, at the same time.

One of the pieces that we have really begun to learn is that we have not been doing a good job of preparing our teachers through college course work in math and in science. We've spent a lot of time around early literacy, around helping make sure that teachers are having the kinds of conversations that Danielle was pointing out.

But we're also learning that they aren't necessarily competent themselves, particularly in the area of math, to be able to then bring that down appropriately to a 2-year-old, 3-year-old, 4-year-old kind of level. So as we redid our early learning standards in Colorado, we paid very special attention to what we should be expecting our 3-, 4- and 5-year-old kids to know and be able to do. Now, how do we make sure our teachers know how to be able to encourage that development in those fields of those young children.

Senator WARREN. Thank you. That's a very interesting point, and I see that I'm out of time, so I'll quit. But I do want to say as long as teacher pay remains so low for our youngest learners, we're going to have difficulty attracting and keeping teachers in this area. And we really have to ask how realistic it is to say that we're going to raise the standards, expect people to go to school to incur more college loan debt, when the consequence is to leave them in a profession where they won't be able to pay off that debt. So I think these pieces are related to each other. We must come back to them.

I thank you all very much for your work, and thank you for being here.

Thank you, Mr. Chairman.

The CHAIRMAN. I just have one last question, mostly for my curiosity more than anything else. I noticed that in the District of Co-

lumbia, I believe that you have involved either one or more—I don't know how many—Montessori schools in your preschool program. It's more than one, maybe?

Ms. EWEN. Yes. I have four schools that are Montessori accredited that are part of the public school system.

The CHAIRMAN. And how is that working?

Ms. EWEN. Beautifully. It's another aspect of parent choice that we have. The programs have Montessori-trained teachers. They have all the Montessori materials. We send the teachers to training when we can that is Montessori specific. Our PD is around Montessori practices, and we train both the teachers and the aids to be Montessori.

The CHAIRMAN. Well, I just personally happen to be a big fan of the Montessori method. Both of our kids attended early learning Montessori, and I've sort of kept in touch with the Montessori schools. We have one in Iowa. Well, no, we have a lot of private, obviously, preschools. There I go again—early learning. We have one elementary school in Iowa that is a Montessori elementary school, and it just does fantastic. So I'm more interested in the Montessori methodology of teaching in the early years.

Do any of the rest of you have any thoughts on that? I really kind of wanted to put it into my bill, but I guess I didn't. But I may want to add it as an amendment to give some preference, or to give some sort of little push for grantees to involve existing Montessori or to start Montessori methodologies in early learning.

Ms. EWEN. Let me just say that one of the reasons we support the Montessori curriculum is because it's one of four research-based curricula that we put out for families. Different children develop in different ways, and different families have different preferences.

I think it's important to have a range of research-based curricula to meet the needs of families, and I would be wary of limiting or prioritizing one over the other. Just because some children thrive in a Montessori environment, other children, like my son, for instance, who is a baseball fanatic—if you put him in a Montessori environment, all he would have done was play with the balls, and I'm not sure he would be reading at 13.

[Laughter.]

So it's really important that we have—see, you're all laughing. I'm serious. I think it's really important that we have a variety of environments that every family can choose from, regardless of the learning style of their child, but that every environment be based on a research-based curriculum that has criteria that has been established in the past that support not just reading and math, but also social and emotional development for our kids.

Mr. YOSHIKAWA. If I could add, really, there are even more than four. What's very strong about the preschool evidence literature is we have 12 or 15 rigorous evidence-based curricula. And I would like to thank the Institute on Education Sciences for funding a lot of that research. I think there have been major advances. I'm starting with Russ Whitehurst and now with John Easton to build the rigorous science of preschool education in this country that is relevant to quality improvement.

The CHAIRMAN. Anyone else?

Senator ALEXANDER. Mr. Chairman, if I could respectfully suggest, you might call that the Harkin School Choice Amendment.

[Laughter.]

The CHAIRMAN. I'll call it the Alexander-Harkin. You're A. I'm H.

But I like that idea, but I want to make sure they're research-based and they're proven—just not some pie in the sky kind of thing that some person has an idea on. It's just that I have been watching the Montessori methodology for a long time, and I'm quite enthused about it.

Now, you say there's some kids who won't thrive in it. Well, I don't know about that. Maybe you're right. But it seems like it's a methodology in which just about any child could thrive—again, you've got to have good parental involvement, too.

Ms. EWEN. And, again, I think it's an opportunity to talk about the need for well-compensated teachers.

The CHAIRMAN. That's true, too.

Ms. EWEN. Because the implementation of the Montessori model in our other models needs somebody who can themselves think through a curriculum, think about how to individualize for each child, and is delivering what kids need. That goes right back to compensation, and we, of course, pay all of our preschool teachers the same way we pay our first, second, and third grade teachers.

The CHAIRMAN. Thank you.

Are there any last things that anybody wants to bring up before we go?

Thank you all very much. You're excellent thinkers on this. You've provided some good input into this. We're going to continue to have some more hearings on this and we hope that we could—our staff, at least, could keep in contact with you as we move ahead to get other thoughts and suggestions as we develop this legislation.

I appreciate it very much. The record will stay open for 10 days for other Senators for questions or comments.

And with that, we'll stand adjourned.

[Additional material follows.]

ADDITIONAL MATERIAL

PREPARED STATEMENT OF SENATOR CASEY

Chairman Harkin, thank you for convening this hearing to talk about the importance of early learning. Like you, I share a strong belief in the need for the Federal Government to play a more active role in promoting access to high-quality early learning.

In my first year in the Senate, the first bill I drafted that was referred to the HELP Committee was the Prepare All Kids Act, my bill to create a universal, voluntary pre-K program. This legislation would build on the investments States are already making, helping them expand access to pre-K so that all children have access to at least 1 year of high-quality pre-K.

Pennsylvania is one of the States that have made significant investments in early learning through its school districts and through the dedicated programs Pre-K Counts and the Head Start Supplemental Assistance Program, serving a total of over 20,000 children.

At the Federal level, the omnibus appropriations measure we recently passed included an additional \$1 billion for Head Start and Early Head Start, which starts to undo the terrible cuts from sequestration.

An increasing body of evidence demonstrates the lasting impact of high-quality early learning. Children who participate in quality early learning programs do better on a host of measures, including both academic measures (higher academic achievement, lower rates of grade repetition, less use of special and remedial education) and social measures (decreased crime, increased socio-emotional skills).

More successful children turn into more successful adults, and society benefits in many ways. We save money by incarcerating fewer people and having to pay for less remedial education. Employers benefit from a better-trained and more capable workforce. It all starts with high-quality early learning.

We're going in the right direction, but we need to do more. We have the opportunity to make a significant investment in early learning, and set future generations on a path to academic and economic success.

Chairman Harkin and his staff worked with me, Senator Murray and Senator Hirono on the Strong Start for America's Children. It has been a privilege to join with the other champions of early learning in the Senate on this important legislation, and I look forward to continuing our discussions on the importance of early learning.

I would like to thank the Chairman for his commitment to early childhood education, and I look forward to hearing from our panelists today and am grateful for their testimony and expertise.

PREPARED STATEMENT OF SENATOR BALDWIN

Chairman Harkin and Ranking Member Alexander, I would like to thank you both as well as my other colleagues on the committee for holding this hearing on high-quality early learning, which is essential to fulfilling both the promise of the American Dream and the fundamental American principle of equal opportunity for all.

I'm proud that this committee has heard the call and has taken action to improve education by working to reauthorize the Child Care and Development Block Grant Program (CCDBG), improving the Elementary and Secondary Education Act, and introducing the Strong Start for America's Students Act. Under the direction of Senators Mikulski and Murray we have rolled back the harmful sequestration cuts that were extremely detrimental to our investments in early learning and care. We continue to make progress, but there is more to be done.

Investments in early learning improve education outcomes, support families, and also make basic economic sense. The Nobel laureate economist James Heckman has found a lifelong economic rate of return of 7 to 10 percent per year per \$1 invested in early learning. Rob Grunewald and Arthur J. Rolnick from the Minnesota Federal Reserve found a \$17 to \$1 return on investment in early learning. It is the very reason that law enforcement, the business community and educators alike are all clamoring for their Federal, State, and local representatives to make sound investments in high-quality early learning.

The sound evidence that early learning investments work is the reason why States are taking the lead in implementing their own high-quality early learning opportunities. I am proud to say that Wisconsin has long been a leader in investing in our children early. Education for 4-year-olds was part of Wisconsin's Constitution in 1848 and the first kindergarten in the United States was founded in Watertown, WI in 1856. We also have strong childcare and early learning partnerships that take a community approach to providing every child access to a comprehensive delivery system for high quality education and care.

Today, Wisconsin is nearing universal "4K," with over 90 percent of school districts offering kindergarten for 4-year-olds, serving 46,914 students—that's 60 percent of the State's population of 4-year-olds enrolled in this program. Governors throughout the country have followed Wisconsin's lead by supporting early learning including Republican Governors in Michigan and Alabama who are pushing some of the biggest increases in preschool spending in the Nation.

It is my sincere hope that this bipartisan push for pre-K in States across our country will soon be mirrored on Capitol Hill. Chairman Harkin, I'm a proud cosponsor of your Strong Start for America's Students Act. This measure would fund preschool for 4-year-old children for families earning below 200 percent of the Federal Poverty Level (FPL), and encourage States to spend their own funds to support preschool for young children with family incomes above that income level. For States like Wisconsin, which already provide preschool for 4-year-olds at 200 percent FPL, funds can be used to expand this program for 4-year-olds and then be used to extend the reach to pre-kindergarten for 3-year-olds.

Furthermore, this act will support early learning partnerships by authorizing \$4 billion for Early Head Start-child care partnerships. These partnerships will be able to serve one in five children living at or below poverty. Wisconsin is proud to boast strong Head Start programs, serving over 13,000 children in Head Start and 1,872 in Early Head Start in fiscal year 2012. I was pleased to vote for a

budget that increased funding by \$1.025 billion over fiscal year 2013, allowing Wisconsin to undo the over 800 slots lost due to the failed sequestration policy. The budget increase also rightly invests \$500 million nationwide in Early Head Start.

Wisconsin is lucky to have a graduate of the Head Start program, Lily Irvin-Vitela, as its new executive director. Ms. Irvin-Vitela has shared with me her own personal success story of how Head Start transformed her life. She also shared the amazing impact Head Start is having on the ground in Wisconsin, including the unique partnership that Head Start programs have between parents, staff, community leaders, and advocates. The early intervention and two-generational approach has transformed the lives of children and their families across my State. I was touched by the story of Charisse Daniels, whose son Rowan was enrolled in Head Start. Not only did Rowan excel but Charisse's entire family dynamic changed. Charisse became involved in Head Start and is now the Local Policy Chairperson for CESA, 2, Jefferson County. Most impressively, she plans on pursuing a higher education in order to work in the early education field.

Mr. Chairman and Ranking Member Alexander, I would like to submit Charisse and Lily's story into the record for this hearing.

Equally as important as investments in pre-K and programs like Head Start are the commitments we make to high-quality childcare. CCDBG is the primary Federal grant program that provides child care assistance for parents that work or are participating in education or training activities. Our recent budget agreement provides CCDBG with \$2.36 billion for fiscal year 2014, an increase of \$154 million over fiscal year 2013. This allows organizations like Wisconsin's Early Childhood Association to provide quality childcare services throughout the State.

Mr. Chairman, I would also like to submit for the record Joan Mrvicka's story. She has been a childcare provider in Wisconsin for 22 years. Over more than two decades, she has seen the investments in high-quality child care and early learning payoff. Joan owns and runs Joan's Tot Spot. She was able to further her professional training and earn the Administrators Credential and the Infant and Toddler Credential, through the T.E.A.C.H. Early Childhood Wisconsin Scholarship Program. T.E.A.C.H. is administered through WECA for early childhood professionals wishing to further their credit-based education using Federal funds from the Child Care and Development Fund.

The bottom line is that investments in early learning opportunities work. It is what the research has shown. It is why States are moving ahead with investments in early learning opportunities. It makes sound economic sense. And, most importantly, it changes lives—not only of the children involved but the lives of their families and communities. It is my hope that this hearing helps illustrate the need for strong Federal investments in early learning so we can expand these success stories and truly provide equal opportunity for all. If we are to out-innovate, out-educate, and out-build the rest of the world we must make sound investments in children, early.

LETTERS FOR THE RECORD

LILLY IRVIN-VITELA¹

DEAR HONORABLE SENATOR BALDWIN: As the executive director of the Wisconsin Head Start Association and a former Head Start graduate, I know the power of high quality early care and education. My family's Head Start experience in Albuquerque, NM was life-forming! My love of learning, joy I take in working and being with others, belief in possibilities, and passion for early learning was forged in my own earliest years and cultivated through public education. As a Maters'-trained community and regional planner, I understand that it takes more than a built environment to form healthy communities. Policies that invest in people, especially young people and families, have tremendous positive impact.

This week as you participate in the HELP hearing, I want to add my voice to the voices of others in support of high quality early care and education in general and Head Start and Early Head Start in particular. One of the distinguishing factors about Head Start and Early Head Start is the unique and powerful partnership between parents, staff, community members, and advocates. In Head Start our work is framed daily as more than early care and education, it is early intervention using a two-generation model. We know from research on the developing brain and social emotional development that it isn't possible to work effectively with any child, without understanding the child in the context of their family, community, and culture. By partnering with parents from issues related to their child specifically and their family's needs in particular, to involving parents in the governance and operations of Head Start and Early Head Start, we daily live our values around empowering families and building community.

Another critically important component of Head Start and Early Head Start is our level of accountability and efficacy around consistently delivering high-quality services to the most vulnerable families who are living in poverty. We are not simply committed to do something. We are committed to doing everything possible to meet families where they're at and connect them to concrete resources through a broad continuum of services. To provide an overview, our comprehensive services range from school readiness, physical activity, nutrition, oral health, and access to mental health providers for children to leadership development, job training, career exploration, and financial goal-setting with families.

Your long-term support of Head Start and Early Head Start as well as high quality early care and education is well-known and deeply appreciated in our Wisconsin Head Start Association. Your understanding of the degree of importance of the early years for children and families is evident in the policy positions you've taken in support of promoting healthy child development. However, supporting high quality early care and education isn't simply a smart child development and family development strategy; it's a strong community and economic development strategy.

The return on investment from decisions such as restoring cuts experienced during budget sequestration, is more than restoring an opportunity for children from low-income and working class families. Rob Grunewald and Arthur J. Rolnick from the Minnesota Federal Reserve have demonstrated through their economic analysis that for every \$15,000 invested per child over the course of 2 years in high quality early care and education, there is a \$260,000 net present real financial gain. In their analysis of the Perry Scope efforts for example, they noted a 17:1 dollar return on investment. Their most conservative financial analysis demonstrated a 4:1 dollar return on investment for public early childhood programs in Chicago. Those returns can be seen in less demand for special education, less life-long criminal justice involvement, less demand for publicly funded social services, fewer unintended pregnancies, greater involvement in the workforce, increased contributions to the tax base, and higher levels of civic involvement.

Comparatively, Rolnick notes that typical economic tools produce zero public return or worse. High quality early care and education and early intervention which uses a two-generation model, more than pays for itself. Equally importantly, Head Start and Early Head Start also generate and support family experiences in which children and families are valued. Within Wisconsin, communities and schools are strengthened by the children and families who have participated in Head Start and Early Head Start. It is our sincere hope that more children and families gain access to high quality early childhood services to reinforce and strengthen their goals for their children and their families!

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Thank you for your support of our children and families.

Respectfully,

LILLY IRVIN-VITELA, MCRP,
Head Start Graduate.

CHARISSE DANIELS

DEAR HONORABLE SENATOR BALDWIN, I am writing to you today to express my sincere gratitude and appreciation for Head Start. My name is Charisse and I am a proud Head Start Parent. I decided to enroll my son Rowan in the program at the age of 4. At first, it was a way for me to help foster a love of learning and make sure a bright mind could continue to grow although I could not afford child care. Previous to enrollment, I'd just lost my job. My fiancé was unemployed. In addition to my son, we also had a 6-month-old daughter, Riley. It was difficult to make ends meet.

After a few months in Head Start I began to see a change. My son began to meet or exceed his grade level expectations. Not only that, but my family dynamic began to change. Through Head Start, not only was my son excelling, my family was making progress toward financial stability. With all of the resources and referrals we were given, we were finally able to live up to our true potential. My fiancé found a job. Although I'm a stay-at-home mom, I found my calling in early childhood education and will be pursuing my degree in the near future. It gave us a renewed sense of confidence. Personally, I believe it is because of the support we received from Head Start that gave us such a boost in confidence and the environment of our home made it possible for us to succeed.

I am so very grateful for the program and the work that they do. Head Start has given my family so much more than I could have hoped for.

Sincerely,

CHARISSE DANIELS,
*Local Policy Council Chairperson,
CESA 2, Jefferson County Head Start; Wisconsin Head Start Parent;
Wisconsin Head Start Association Board of Directors.*

FEBRUARY 4, 2014.

JOAN MRKVICKA

DEAR SENATOR TAMMY BALDWIN: I have been a family child care provider for over 22 years and I just wanted to let you know the value of quality early child care and the means to get that for parents. There will always be grandmas available to babysit the children; however, the pre-K and kindergarten grades in elementary schools are getting the brunt of that. Many children in our community receive quality early child care and preschool from birth, but many others do not. It is essential for families that cannot afford a quality early childhood environment for their children to have access to a program for the children to be able to "catch up" to the rest of the children as they begin their education. I am glad 4-K is now an option for families in our community.

The other programs that I am thankful for and have participated in as a family child care provider and educator are the TEACH Wisconsin Scholarships and the REWARD program offered through WECA. While I have a degree in another field, it was not Early Childhood. After being in the field for so many years, I did not feel it necessary to go back to school for that degree. I also did not have the funds to go back to college. When I found out about the REWARD program, it gave me an incentive to further my early childhood education. Through the use of the TEACH scholarships and many awesome early childhood professional mentors, I completed the Administrators Credential and the Infant Toddler Credential for another 33 college credits in the field of Early Childhood. I was then able to get a much higher REWARD!!

I am married with a family to support, but I see this as a great benefit to so many younger adults starting out in the field of early childhood. Trying to buy books, pay tuition, afford rent and put food on their table is very hard while working. Through the TEACH scholarship program they not only get a portion of their tuition paid for, but books and release time, in addition to a bonus or higher wage after completion.

This is a great and needed program in our community and I see many happy outcomes running around every day in my home as the beneficiaries of getting a higher quality care and early childhood education.

Sincerely,

JOAN MRKVICKA,
Joan's Tot Spot,
 2418 Dahlk Circle,
 Verona, WI 53593.

PREPARED STATEMENT OF THE AMERICAN PUBLIC HUMAN SERVICES ASSOCIATION (APHSA) AND THE NATIONAL ASSOCIATION OF STATE CHILD CARE ADMINISTRATORS (NASCCA)

Chairman Harkin, Ranking Member Alexander and Honorable Members of the Senate Health, Education, Labor, and Pensions Committee, on behalf of the American Public Human Services Association (APHSA) and the State child care administrators that it represents, we respectfully submit this statement for the record regarding the Senate hearing on February 6th entitled "Supporting Children and Families through Investments in High-Quality Early Education."

APHSA is a nonprofit, bipartisan organization representing State and local human service professionals for more than 80 years. APHSA serves State child care administrators through its affiliate, the National Association of State Child Care Administrators (NASCCA). We thank Congress for supporting early learning programs through the Fiscal Year 2014 Consolidated Appropriations Act (P.L. 113-76). This funding moves States in a positive direction. It provides the necessary tools to assist States in their collaborative efforts to achieve positive outcomes for children and their families.

The hearing called attention to the multiple Federal programs serving the early care and education needs of children, which can often be viewed as duplicative, overlapping and too fragmented. We have a workable, bipartisan, solutions-focused blueprint for achieving better, more efficient and sustainable outcomes for low-income children and their families.

APHSA's policy initiative, *Pathways: The Opportunities Ahead for Human Services*, was developed in coordination with cabinet-level commissioners of health and human services agencies, along with administrators and program directors from States and counties across the country. The outcomes we seek—and that a revitalized system can achieve—include *gainful employment and independence; stronger and healthier families, adults and communities; and sustained well-being of children and youth*. We know these outcomes can be produced far more effectively, sustainably and efficiently in a transformed human services system. Child care and other early education programs make positive contributions to a broader human services transformation effort. However, in many ways they and other programs remain limited in their ability to contribute to the sustained outcomes that APHSA envisions in *Pathways*.

The *Pathways* vision involves a fully integrated health and human services system that operates a seamless information exchange, shared services, and a consumer-focused benefits and services delivery system. Public human services must move in new directions—down new pathways—if we are to meet increased demand for assistance at a time of tight budgets and heightened public expectations for effective outcomes in the work we do. Our solutions require changing health and human services in a way that focuses on the needs of people rather than compliance with bureaucratic outputs. This requires a new commitment to outcomes over process, and a shared investment among Federal and State partners.

Our recommendations include the following:

Sustainable Federal resources must be provided for States to promote innovation leading to a transformative system and positive outcomes for children and families. Such resources are essential to make the best use of available funds and encourage the use of integrated State systems of health and human services, synchronized data applications, and streamlined Federal data reporting cycles and requirements. We strongly support cross-cutting approaches that reach across multiple systems and strive for collective, robust results.

These systems should be supported by the flexible use of funds and facilitate far more effective outcomes with the resources we have available. States must have the ability to blend Federal, State and local dollars across government agencies and their programs to provide a solid, sustainable foundation for these innovations to grow and thrive. The flexible use of Federal dollars can also help State agencies tap into private resources and blend them with existing dollars to support these efforts. Soliciting buy-in from external stakeholders is essential in this process. This would

amplify State efforts to collaborate, coordinate, and shift costs across multiple systems and sectors in order to produce robust results. States' inability to move funding across programs and among systems hinders their ability to innovate and meet children and families' service needs. We must be able to take advantage of such flexible approaches in this difficult economic and political environment.

For example, the U.S. Departments of Education and Health and Human Services recently awarded six additional States a total of \$280 million in Race to the Top Early Learning Challenge (RTT ELC) funds to improve access and build a statewide system of high-quality early learning and childhood development. These States will join the 14 existing States participating in the first and second round of funding opportunities, initially released in 2011. RTT ELC joins the current list of cross-cutting, ground-breaking innovations supporting a transformative agenda in government. However, APHSA and NASCCA believe the RTT ELC program should be a nationwide effort touching all 50 States, tribal government agencies and U.S. territories and not limited to a few States competing for a small pool of funds.

These funding opportunities build on and help strengthen the capacity of existing programs. They promote school readiness for children while cultivating partnerships among public, private and community-based sectors aimed at achieving more efficient use of resources and maximizing impact. Such initiatives need to be fully funded and sustained overtime in order to see tangible results and a solid return on investment.

Because CCDBG is a flexible block grant, there are several approaches that Congress can take to support and maximize these efforts. CCDBG's reauthorization can be a vehicle that helps move this agenda forward. We recommend adjusting CCDBG funds to keep pace with inflation using the consumer price index. The flexibility within CCDBG must also be preserved to implement these types of innovations. APHSA and NASCCA's recommendations for reauthorization can be found here: <http://www.aphsa-nascca.org/content/dam/NASCCA/PDF%20DOC/Home/CCDBGReauthorizationPolicyBrief.pdf>.

Rules, regulations, and laws must be updated and made more flexible to account for political contexts and practical considerations of timeframes, costs, and workforce issues. For decades, systems and data bases have been narrowly designed to meet the needs of program "silos" using individual data sets with different definitions. They provide a poor fit for the use of innovation in modern technology or interagency data sharing in real time. Health and human services agencies offer a wide array of supports to a large and diverse population. In many situations, individuals need more than one service or benefit. However, the pressures of increased demand and declining resources have created roadblocks for States. An integrated, coordinated system of care would address these challenges, but will require robust reforms and a shared investment.

This shift in our paradigm also requires States to embrace the use of timely, reliable data. Electronic data sharing across systems and in real time requires standardization and the use of modern and updated technology. States can use these approaches to improve information exchanges across programs, identify service gaps and inform evidence-based practices.

Through enhanced funding opportunities within the Affordable Care Act and a time-limited waiver of normal cost-allocation requirements, States are able to take advantage of some of these innovative approaches. APHSA's National Workgroup on Integration (NWI) has developed guidance for States on the need for horizontal linkages of health and human services along with an interoperability and integration continuum.

NWI has published several guidance documents, including: Governance and Technology Guidance for integrated health and human services and a toolkit for States in maximizing the A-87 cost allocation exception. These resources assist States in streamlining and connecting clients with the appropriate services; aligning eligibility and program standards; building interoperable information and technology systems; and strengthening program integrity. We encourage cross-cutting approaches like these and have taken critical action steps bringing together Federal, State, non-profit and private industry partners to support States in these efforts. The CCDF program is critical to the NWI work. There are numerous benefits to aligning CCDF eligibility standards with the Temporary Assistance for Needy Families, Supplemental Nutrition Assistance and Medicaid programs. CCDF administrators recognize that strategies that minimize agency burden and expand and improve access to child care subsidy and other supports for low-income children and families are critical at this time. CCDBG also does not currently provide for a specific systems earmark to support States in improving program integration and integrity. Therefore, CCDF Administrators embrace these integrative efforts.

Processes for reviewing and identifying waste and fraud should also be efficient, and methodologies for calculating improper payments must be based on measurements that accurately reflect States' work. Program integrity and accountability standards should focus on outcomes, not outputs, and should gather reliable information needed to design and improve effective systems. In this current environment, States are pressured to meet restrictive Federal requirements, and this in turn has diminished States' ability to be innovative and outcome-driven in their approaches to meet the service needs of families. NASCCA and another APHSA affiliate, the National Association for Program Information and Performance Measurement, have identified areas within the CCDF program where waste, fraud and improper payments can be reduced and have collaborated with HHS on these efforts. This Federal-State partnership must continue to make the necessary improvements within our current delivery system.

Support the Government Accountability Office's (GAO) 2012 annual report recommendation regarding opportunities to reduce duplication, overlap and fragmentation in Federal Government programs (GAO-12-342SP). GAO recommended that HHS and DOE extend their coordination efforts to other Federal agencies supporting early learning. This includes the Departments of Agriculture, Interior, Justice, Labor, and Housing and Urban Development, as well as the General Services Administration and other agencies. GAO's recommendation calls for HHS and DOE to follow through with their plans to include these agencies in an interdepartmental working group. Currently, there are interdepartmental efforts within DOE and HHS to improve the school readiness needs of low-income children. APHSA and NASCCA remain essential partners in this work and encourage strengthening the Federal-State partnership. APHSA and its affiliate members have also been included in HHS's strategic plan for fiscal years 2004-9 and succeeding years to help identify the similarities and differences in program goals, objectives and target populations that tend to overlap or be complementary. Being a part of the conversation helps ensure that resources are being used effectively and efficiently. HHS has worked in consultation with APHSA, its affiliates, and other State associations and partners in the development of these common goals and objectives. We support GAO's recommendation and encourage the expansion of these activities to other agencies.

Thank you for the opportunity to submit our comments and for your interest in examining the investment of quality early education and care. We look forward to a full reauthorization of CCDBG and thank the Senate HELP Committee for its efforts. If you have any questions, please contact Rashida Brown at (202) 682-0100 x225 or rashida.brown@aphsa.org.

Sincerely,

TRACY L. WAREING,
Executive Director, APHSA.

JULIE INGERSOLL,
Chair, NASCCA.

PREPARED STATEMENT OF LOCAL INITIATIVES SUPPORT CORPORATION (LISC)

Chairman Harkin, Ranking Member Alexander, and distinguished members of the Senate Committee on Health, Education, Labor, and Pensions:

The Local Initiatives Support Corporation (LISC) commends you for coordinating a hearing on early childhood education and appreciates the opportunity to submit written testimony. This discussion is a positive step toward understanding the importance of early childhood development and securing critically needed investments to ensure that all children, especially low-income children, are given a strong start and enter kindergarten ready to learn. As you consider ways that Congress can help children get an early start on the pathway to success, we encourage you to recognize the critical role that early childhood facilities play in preparing young children for achievement in school and in life, and urge you to ensure that Federal policies adequately finance the acquisition, construction, and improvement of these spaces.

ABOUT LISC

Established in 1979, the Local Initiatives Support Corporation (LISC) is a national nonprofit with Community Development Financial Institution (CDFI) designation, dedicated to helping community residents transform distressed neighborhoods into healthy places of choice and opportunity—good places to work, do business and raise children. LISC mobilizes corporate, government and philanthropic support to provide local community development organizations with loans, grants

and equity investments; local, statewide and national policy support; and technical and management assistance.

LISC has local offices in 30 cities and partners with 60 different organizations serving rural communities throughout the country. We focus our activities across five strategic community revitalization goals:

- Expanding Investment in Housing and Other Real Estate;
- Increasing Family Income and Wealth;
- Stimulating Economic Development;
- Improving Access to Quality Education; and
- Supporting Healthy Environments and Lifestyles.

For more than three decades, LISC has developed programs and raised investment capital to help local groups revive their neighborhoods. Because we recognize the link between human opportunity and social and economic vitality, we have spent the last 17 years working to bring high quality early care and education settings to low-income neighborhoods where children enter the world at high risk for negative outcomes. Through our signature early childhood program, the Community Investment Collaborative for Kids (CICK), LISC has invested \$48 million in planning and developing 184 new facilities serving 20,000 children in more than 65 low-income urban and rural neighborhoods across the country.

OVERVIEW

Early childhood is a critical development period. Research shows that a complex interplay between genetics and environment profoundly influences how children grow physically, socially, and emotionally. Investments in high quality early childhood programs can help promote healthy development and strong communities. Those active in community revitalization believe without question, that early care and education programs are essential parts of every neighborhood—they prepare young children for success in school and life, support working parents, and improve family well-being.

Regrettably, many families—particularly those who are low-income or in rural areas—lack access to the stable, high-quality early childhood centers that parents need to maintain gainful employment and children need to grow and thrive. Additionally, while there is appropriate focus on the need for high quality curriculum and qualified teachers, the physical environment is an essential feature that is often overlooked.

In this testimony, we highlight the important role that physical environments play in supporting the quality of early learning programs and healthy early childhood development and encourage Congress to address the need for comprehensive early childhood facility policies.

BACKGROUND

Early Childhood is a Critical Development Period

Decades of research has shown that early life experiences are extremely important to the social, emotional, and academic development of children.¹ Positive experiences promote healthy brain development and behavior, while negative experiences undermine development—and, in severe circumstances, permanently impair a child's nervous and immune system, stunting healthy growth.² High quality early care and education is widely regarded as the single most effective intervention to promote healthy development and close the academic achievement gap for low-income children at risk for poor social and economic outcomes.³ The data are clear: the quality of one's early childhood experiences profoundly influence that person's future life trajectory.

¹Jack P. Shonkoff and Deborah A. Phillips, Editors, *From Neurons to Neighborhoods: The Science of Early Childhood Development*, National Research Council Institute of Medicine, National Academy Press, Washington, DC 20000.

²National Scientific Council on the Developing Child. "Excessive Stress Disrupts the Architecture of the Developing Brain. Working Paper No. 3" (2005) http://www.developingchild.net/pubs/wp/Stress_Disrupts_Architecture_Developing_Brain.pdf. (Accessed June 17, 2009).

³<http://www.readynation.org/uploads/20130919/ReadyNationVitalLinksLowResEndnotes.pdf>, Schweinhart, L.J., Montie, J., Xiang, Z., Barnett, W.S., Belfield, C.R., & Nores, M. (2005). *Lifetime Effects: The High/Scope Perry Preschool Study Through Age 40*. Ypsilanti, MI: High/Scope Press. And Reynolds, A.J., Temple, J.A., Robertson, D.L., & Mann, E.A. (2002). *Age 21 Cost-Benefit Analysis of the Title I Chicago Child-Parent Centers*. Madison, WI: Institute for Research on Poverty. And FPG Child Development Center. (1999). *Early Learning, Later Success: The Abecedarian Study*. Chapel Hill, NC: University of North Carolina.

The Quality of Early Childhood Facilities Matters

While many factors contribute to program quality, the physical environment is an essential feature that is often overlooked. The link between the quality of buildings and the quality of programs tends to be only vaguely understood and largely undocumented among child care providers. Despite this inclination, evidence about the connection between space and effectiveness has been found even when physical space is not the focal point of the research undertaken. A study conducted at the School for Young Children (SYC), a distinguished preschool program housed at St. Joseph College in West Hartford, CT, provides a compelling example.⁴

Every State has a minimum adult-child ratio for licensed centers, in large part because attention from nurturing adults is a prime indicator of quality in child care programs. SYC is a highly regarded preschool program with a more than ample staffing ratio; the program is largely viewed as meeting if not exceeding minimum quality standards. Yet, when a research team set out to monitor enrolled children's contact with adults during free play time they found shocking results: **Only 3 percent of the children's time was spent engaged in meaningful interactions with a teacher.**

While the SYC executive director was digesting the researchers' negative findings in order to develop a workable solution, her organization moved to new accommodations. A routine followup test in the new space immediately showed a strikingly higher result. **Teacher-child interactions increased to 22 percent.** There had been no change in the management, staff, or program, only the physical space. The new space, which Bye had taken pains to design, was considerably roomier and there were bathrooms, telephones, storage space, and other logistical necessities in each classroom. Adults no longer had to leave the room to escort children to the bathroom, retrieve or store supplies, or take a phone call. Fewer distractions and interruptions for adults naturally meant more time for children.

Both children and staff benefited from the new space configuration. The more generous square footage allowed staff to configure each classroom into well-defined areas for different activities. Children were no longer crowded together into inadequate space and distracted by one another, so they ran into conflicts less often, and had better play experiences—making their interactions with adults and other children more constructive. Teachers were able to use their time in a more effective and rewarding way, resulting in higher morale and lower staff turnover. Overall, the effect of the new space on the content of the program was considerable and measurable—even when not a single change had been made in the program itself.

Space matters: a facility's layout, size, materials and design features can improve program quality and contribute positively to child development while a poorly adapted and overcrowded environment undermines it.⁵ Bathrooms adjacent to classrooms, accessible cubbies, and child-sized sinks, counters, furnishings and fixtures increase children's autonomy and competence while decreasing the demands on teachers. Early learning centers with ample classrooms divided into well-configured activity areas support uninterrupted self-directed play and exploration. The physical configuration of early care and education spaces directly affect adult/child interaction and influence how children grow and learn.

The National Association for the Education of Young Children (NAEYC) acknowledges the importance of a quality environment in the following statement:

"The physical environment sets the stage and creates the context for everything that happens in any setting—a classroom, a play yard, a multipurpose room. A high-quality environment welcomes children; engages children in a variety of activities; provides space for individual, small-group, and large-group activities; and generally supports the program's philosophy and goals. Ultimately, the physical environment must convey values and messages about who is welcomed, what is important, and what the beliefs are about how children learn."⁶

What Facilities Experts Know

Although physical spaces play an important role in promoting program quality and healthy development, it is rare to find high quality facilities designed to meet the unique needs of very young children, especially in low-income communities. Early childhood specialists have long maintained that the physical environments where learning takes place—and where young children spend the majority of their

⁴Tony Proscio, Carl Sussman & Amy Gillman, Authors, *Child Care Facilities: Quality by Design*, (2004). <http://www.lisc.org/content/publications/detail/815>.

⁵http://www.lisc.org/docs/publications/2007_nieer_cick_facilities_brief.pdf.

⁶<http://www.naeyc.org/store/node/402>.

waking hours—significantly influence the quality of early care and education programs.

Facilities experts and those proficient in financing the design, acquisition, construction, and improvement of early care and education spaces concur and largely agree that:

- Well-designed facilities enhance child development and program quality;
- An adequate supply of facilities is needed to support rapidly increasing preschool education programs;
- The quality and location of the facilities can encourage enrollment and parent involvement;
- Facilities can help promote a positive workplace in an industry challenged to retain experienced teachers;
- Child care program income, especially in low-income communities, is typically not sufficient to cover the full cost of delivering quality early education services and doesn't allow for the added cost of constructing or improving appropriate facilities; and
- Few centers have the experience or personnel to handle the complexities of real estate development tasks and require specialized technical assistance to address their facilities needs.

Early Childhood Facilities Financing Challenges

Despite what is known about the importance of the spaces where learning takes place, there is no dedicated source of capital to help early care and education programs develop well-designed facilities suitable for our youngest learners. Programs serving low-income communities are highly dependent on public operating revenues that don't cover the cost of purchasing or renovating an appropriate facility. Without a consistent and effective financing system or capital subsidies, providers are left to pursue piecemeal approaches, cobbling together small donations and grants from a variety of sources. This prevents the early childhood field from addressing its physical facility needs and creating the kind of environments that support high quality programs.

Historically, private financial institutions have not made significant infrastructure investments in early care and education—particularly in economically distressed areas. Few mainstream banks, credit unions, and lending institutions are willing to finance early childhood facility projects, which tend to require relatively small, complex loans often characterized by uncertain future funding for repayment through government operating subsidies. The projects generally have little to no equity, and limited collateral value. In addition, private banks typically don't employ staff with specialized knowledge of the child care sector, consequently they are unable to understand the needs of child care or preschool centers and assist program directors lacking experience with real estate development and financing.

Certified Community Development Financial Institutions (CDFI) working in market niches that are underserved by traditional financial entities are among the small number of organizations who have made investments in early childhood physical spaces. They have a proven track record in economically challenged regions and are experienced with providing a unique range of financial products and services that spur private investment in their target markets. Unfortunately, given the limited funding available to CDFIs to carry out their comprehensive mission, demand for early childhood facilities capital far outstrips supply.

RECOMMENDATIONS

As Congress considers ways to help children get an early start on the pathway to success, we urge you to:

1. Recognize the critical role that early childhood facilities play in preparing young children for achievement in school and in life. Congress has the power to influence and support State and local early childhood priorities. We believe that conversations about early care and education should always acknowledge the significant impact of early childhood physical settings on early learning.

2. Ensure that Federal policies adequately finance the acquisition, construction, and improvement of early care and education spaces. Currently, there is no dedicated source of funding for the acquisition, construction, and improvement of early care and education spaces. Additionally, the economic instability of the past 5 years has resulted in very little investment in early childhood physical infrastructure. Capital must be available in order for early care and education providers to create high quality physical spaces that promote early learning. We are encouraged by the national dialog on the importance of investments in early childhood development, and request that you create the supportive policy, regulatory,

and funding environment that is needed to enable the early care and education field to meet its physical capital needs.

CONCLUSION

As investments are made to increase access to preschool and child care, attention must be paid to the physical environment where many young children spend the majority of their waking hours. Without support for facilities, programs will locate in the least expensive and most readily available spaces—makeshift, donated, or surplus space such as basements and storefronts or outdated classrooms for older students that haven't been adapted for our youngest children and fall far short of standards to support high quality programs.

We look forward to continuing conversations with you and your staff. Our organization serves on the executive committee of the National Children's Facilities Network (NCFN), a coalition of like-minded nonprofit financial and technical assistance intermediaries involved in planning, developing, and financing facilities for low-income child care and early education programs. Both LISC and NCFN would welcome an opportunity to serve as a resource. If you would like additional information about our work, please contact Amy Gillman, senior program director at (212) 455-9840, or agillman@lisc.org, or Nicole Barcliff, senior policy officer at (202) 739-9296 or nbarcliff@lisc.org.

Thank you again for your leadership.

PREPARED STATEMENT OF MATTHEW E. MELMED, EXECUTIVE DIRECTOR, ZERO TO THREE

Mr. Chairman, Ranking Member Alexander, and members of the committee, thank you for holding this hearing on an issue that will help determine the future competitiveness of our country: the need to invest in early childhood education and care in America. As the committee considers the Federal role in early learning programs that help lay the foundation for success, I urge you to remember that this foundation has its beginnings in the first days, weeks, and years of life. Babies are born learning as their brain development proceeds at an unparalleled pace. The foundational brain architecture on which all learning that follows will rest, is shaped and molded by the quality of the experiences and relationships young children have in the first 3 years of life. Therefore, if I have one message for the committee members as you consider the direction of early childhood education, it is "*Don't forget the babies!*" Learning happens from the start, and so should our investments.

ZERO TO THREE's mission is to promote the health and development of all infants and toddlers. The organization was founded 35 years ago by an interdisciplinary group of researchers and practitioners who came together to share and enhance their work with the latest research on how young children learn and how brains are built starting at birth. It is this research and how it can be applied in policies related to early learning that we draw on for our comments today.

SUMMARY OF MAJOR POINTS

- Early brain development during the infant-toddler years lays the foundation on which will rest all later architecture for higher-level functioning. Children who face adverse experiences in infancy and toddlerhood can fall behind before their second birthday—long before they reach pre-Kindergarten age.
- Research has shown proven strategies to intervene early and promote positive development, but quality services for infants, toddlers, and their families are lacking.
- Early learning policy should be built as brains are—from the bottom up, starting with outreach to pregnant women and continuing with comprehensive services that reach the youngest children and their families where they are, in their homes or in child care settings.
- More resources are needed for early care and learning programs and especially for those focused on the youngest children: the Federal Government plays the predominant role in funding infant-toddler services, but devotes only about \$4 billion a year to their early care and learning even though almost half of all children under three live in low-income families.

THE INFANT-TODDLER YEARS LAY THE FOUNDATION FOR ALL LATER LEARNING

Babies are born with billions of neurons. These neurons start to form connections, or synapses, at a rate of 700 every second to organize the brain for important functions.¹ Synaptic formation for critical functions peaks early, in the first year of life

for hearing, sight, and language and soon after for cognitive and social-emotional functioning. This doesn't mean we don't continue learning and creating connections in our brain—of course we do. But our earliest “learning” comes from the experiences that reinforce—or fail to reinforce—the first important connections within the brain, thus determining if the foundation for later higher-level functioning will be strong or fragile.

Babies learn within the context of their earliest relationships with trusted adults—usually with parents, but also with other close caregivers. As babies, the way we are held, talked to and cared for teaches us about who we are and how we are valued. This profoundly shapes who we will become. Nurturing relationships foster strong social-emotional development, which must go hand in hand with cognitive and physical development. Emotions *drive* early learning. Social-emotional characteristics such as persistence, the ability to forge relationships, cope with frustration, feel pride in accomplishments, and cooperate with peers are the skills that will carry children to success in school and all through life.

This period of marvelous development is also one of great vulnerability. Babies who do not receive the positive experiences they need for strong development in the first few years, who do not have the protective relationships that can buffer them from adverse experiences, can fall behind quickly. These adverse experiences—such as poverty, maltreatment, maternal depression, substance abuse, or environmental deprivation such as lack of heat or housing instability—can create persistent stress that, if not alleviated with positive early supports for babies and parents, becomes toxic to the developing brain.

Disparities among different socio-economic groups in areas such as language appear as early as the first year of life.² By age two, disparities across a wide range of cognitive and social-emotional indicators are clear.³ Infants and toddlers who experience early adversity are more likely to experience developmental delays and disabilities.⁴ *Unquestionably, young children fall behind long before they reach the age of formal pre-Kindergarten programs.*

INTERVENING EARLY PROMOTES POSITIVE DEVELOPMENT BUT QUALITY INFANT-TODDLER SERVICES ARE LACKING

The good news is that program evaluation research shows effective strategies to improve the lives of at-risk infants and toddlers and their families. Proven approaches to supporting early development, several beginning in the important prenatal period, can help buffer toxic stress, promote stronger social-emotional foundations, and improve cognitive and language development, as well as promote family self-sufficiency. However, such services are in short supply.

- **Early Head Start** has been found through rigorous evaluation to have positive impacts on children's cognitive and language development, approaches to learning, and reducing behavior problems. Parents were more involved with their children's development—and remained engaged after their children left the program—provided more support for learning, and had reduced risk of depression.⁵ *Less than 4 percent of eligible infants and toddlers are able to participate in Early Head Start.*

- **Evidence-Based Home Visiting**, depending on the model used, has positive impacts in one or more domains, including child health, child development and school readiness, maternal health, reductions in child maltreatment, improved family economic self-sufficiency, and positive parenting practices.⁶ *Yet, in 2011/2012, nationwide only 13.6 percent of pregnant women and parents with infants and toddlers received a home visit, although individual States ranged from 3.7 percent in Texas to 30.6 percent in Minnesota.*⁷ The Maternal, Infant, and Early Childhood Home Visiting (MIECHV) program is helping States reach more at-risk families with young children with evidence-based services, but will expire at the end of this year if not reauthorized and funded.

- **High-Quality Child Care** has been shown to produce positive effects in the areas of early learning, cognitive and language development, and school achievement, as well as positive associations with early social and emotional development.⁸ Positive effects can endure into the adult years, particularly for children from the poorest home environments.⁹ Children under age 3 represent 28 percent of children served through the Child Care and Development Block Grant. *Nationally, half of all requests for child care referrals are for infant-toddler care,¹⁰ but CCDBG serves only 1 in 6 eligible children. State reimbursement rates often are too low to ensure parents can access quality services, even if they can find them.*

The quality of child care for infants and toddlers is a particular concern. For 6 million infants and toddlers, child care is an important environment influencing their early development. We urge the committee not to dismiss this setting as irrelevant to early learning and education simply because it also serves an important

function for adults by enabling parents to work. Babies' brains are shaped by the experiences and relationships that come their way. They do not know what adults label these experiences. It is up to us to ensure they are of high quality.

National and State studies consistently raise concerns about the quality of care infants and toddlers are receiving. National studies have found that the majority of child care for infants and toddlers is of fair to mediocre quality and only a small fraction is of high quality. In fact, the most recent national study found of infants in care, 75 percent of these were in low or mediocre quality care.¹¹ For infants in child care centers, quality was higher for those living in poverty than for children living in near poverty—between 100 and 200 percent of the Federal poverty level.¹² One study found care of good/developmentally appropriate quality in just over 8 percent of infant/toddler classrooms, as compared to nearly 24 percent of preschool classrooms. Medium/mediocre quality care was found in 51 percent of infant/toddler classrooms and poor quality in over 40 percent. In preschool classrooms, medium/mediocre care was found in 66 percent and poor quality in 10 percent.¹³ State studies bear out these findings. A study of child care for Georgia's infants and toddlers found that two-thirds of infant-toddler classrooms in child care centers¹⁴ and 75 percent of family child care providers¹⁵ provided care of poor quality. Georgia has a robust pre-Kindergarten program, but babies and toddlers who do not receive the strong developmental support they need from the settings they are in early in life will truly find themselves playing catch-up at age 3 or 4.

Paid parental leave is the first step in supporting positive development. I also want to highlight for the committee another important factor for getting children off to a good start in life: time with their parents following birth or adoption. It takes several months of focused attention to become a responsive caregiver to a young child, establishing a pattern that will influence the child's long-term cognitive, social, and emotional development.¹⁶ Parental time off facilitates the early detection of potential developmental delays at a time when problems can be most effectively addressed and interventions identified to minimize them.¹⁷ Yet most employed women and men do not have access to paid parental leave that could help them afford to take the time off needed to build that nurturing bond with their children.

BUILD EARLY LEARNING POLICY FROM THE BOTTOM UP

Early learning policy should be built as brains are, from the bottom up. This means creating a continuum of services starting even before birth and reaching the most vulnerable children and families as early as possible. Approaching policy in this way, rather than starting in the middle and working down as resources and inclination permit, creates an unparalleled opportunity for true prevention policies that promote positive, healthy development that will resonate throughout a child's life, increasing the individual's well-being and future contributions to society.

In systems terms, this translates into a continuum of quality services starting at birth or during the prenatal period and continuing through preschool—but it must start at the earliest possible opportunity. Most people can envision a preschool setting and think about how to expand access for more children. For infants and toddlers we must ask a different question: How can we reach at-risk young children wherever they are and support their parents and other caregivers in giving them the very best developmental start? Thus the early childhood system is not just a linear continuum. It is also a broad web of services that must reach children and families at home, in child care, and for very low-income children, in comprehensive settings such as Early Head Start.

An often overlooked component of such a system is ensuring access to early intervention services for infants and toddlers with developmental delays or disabilities (funded at the Federal level through Part C of the Individuals with Disabilities Education Act, or IDEA). These services must be viewed as an integral part of any early care and learning system with the goal of giving all children the opportunity to reach their potential. Intervening early can help promote the success of all children by addressing developmental delays and disabilities before they progress too far, reducing or eliminating the need for costly special education services later on. Early identification and intervention can improve cognitive and social skills, lead to higher achievement and greater independence, and promote family competence and well-being.¹⁸ Viewing early intervention in this manner is especially important when discussions about pre-Kindergarten programs look to reducing the need for special education services as an outcome. Achieving this goal is unlikely if children are not reached early, when their delays or disabilities are first detectable and more easily addressed. Moreover, these discussions about pre-Kindergarten and other early learning programs usually focus on reaching the most at-risk families, the same

families in which children have a higher incidence of developmental delays and disabilities.

The work of Nobel Laureate in Economics James Heckman bears out the wisdom of a policy approach that starts with the youngest children. In looking at the rates of return to human capital investment at different ages, he found the greatest return in programs targeted in the earliest years.¹⁹ His economic model also shows that children who have received optimal support and services during the birth to 3 years can expect greater benefits from preschool interventions than children who have not had such advantages.²⁰

Professor Heckman is not alone. In 2012, in its report *Unfinished Business: Continued Investment in Child Care and Early Education is Critical to Business and America's Future*, the Committee for Economic Development updated its recommendations on early childhood education to “recommend meeting the comprehensive early learning and development needs of children *as early as possible in their lives*, especially for those whose healthy development is most at risk.” They noted that in the past, “CED has called for Federal and State funding sufficient to ensure access to high-quality preschool for all. *We now amend that recommendation to include the range of high-quality early childhood programs and services that have demonstrated effectiveness* for children from birth to age 5.” [emphasis added] Citing the strategies of reaching pregnant women and parents of infants and toddlers through programs such as home visiting, developmental screening, high quality child care, and expansion of Early Head Start, the report urged that “Business leaders should tell policymakers those strategies are just as important to them as preschool.”²¹

INVEST GREATER FEDERAL RESOURCES, PROVIDE LEADERSHIP ON INFANTS AND TODDLERS

We believe the resources now invested in the early care and learning of our Nation's children are not adequate to provide the broad access and high quality needed if this vital period of learning is to create the strong foundation needed for later education to be most beneficial. *The most critical point for infants and toddlers is to understand both the overwhelming importance and the relative scarcity of Federal funding for early care and learning programs for this age group.* The Urban Institute estimates that in 2008 the Federal Government accounted for 78 percent of all public funding for this category of spending on children under age 3 (\$3 billion Federal compared with \$.9 billion State funding). For children ages 3 to 5, Federal funds accounted for only 22 percent (\$13.4 billion Federal compared with \$47.3 billion State).²² Clearly, States are not investing in the youngest children, and Federal support is at a minimal level, especially when we consider that almost half of all infants and toddlers live below 200 percent of the Federal poverty level.²³ In 2011, less than \$4 billion in Federal funds were spent on the early care and learning of our babies and toddlers.²⁴ We believe the Federal Government must take the lead to ensure access to high quality services and provide incentives for States to invest as well.

We understand there is concern about the GAO findings on Federal programs that address child care and early learning in some way. We believe only a handful of these programs provide substantial support for early care and education, and they were developed to meet different purposes or function within different contexts that allow for flexibility at the State or local level. Resources can always be used more efficiently. But that does not mean that an underfunded system—one in which the Federal Government spends roughly \$330 per capita on early learning for infants and toddlers when almost 6 million live in low-income families—can be expected to give the youngest children the strong start they need to avoid or minimize learning gaps. Such a system makes their efforts to fulfill their potential a greater struggle than any child should have to undertake and places our future competitiveness as a nation at risk.

ZERO TO THREE strongly supports the Strong Start for America's Children Act with its vision for a high-quality birth-to-five system. We believe the funding for such a system must be equitably distributed across the continuum so that infants and toddlers do not spend important years developmentally waiting for access to quality supports for their earliest learning. Therefore, we particularly appreciate the recognition of the needs of infants and toddlers in the robust funding the bill proposes for partnerships between Early Head Start and child care. The infant-toddler set-aside option in the pre-Kindergarten portion of the bill also would give States the incentive to build more high-quality child care programs needed to give infants and toddlers the strong developmental start they need to take full advantage of

their preschool experience. As the bill moves forward, we urge the committee to require States to use these funds for the youngest children.

Congress should invest in our Nation's young children and work with States to build services and systems that ensure every child has the opportunity to reach his or her potential and promote positive development, not playing catch-up:

- Establish a ***national paid family leave program*** so that more parents could afford to spend the first weeks and months of their babies lives establishing the all-important bonds that are the first steps in the social and emotional development that is the bedrock of putting children on the road to school readiness.
- Expand ***Early Head Start*** and using its proven approach as a platform—through EHS-Child Care partnerships as well as State establishment of high quality child care programs—to raise the quality of early care and learning services and give many more infants and toddlers the chance for a strong start instead of falling behind.
- Ensure access to early intervention for infants and toddlers with developmental delays or disabilities by adequately funding ***Part C of IDEA***.
- Invest in ***high quality child care*** and emphasizing the development of a quality infrastructure—high standards and a well-trained infant-toddler workforce—so that the youngest children have access to the best care from the start, long before they enter pre-Kindergarten.
- Ensure access for 3- and 4-year-olds to ***high-quality pre-Kindergarten*** services, giving families the choice of diverse settings to meet their needs.

Thank you for the opportunity to provide ZERO TO THREE's insights to the committee. We stand ready to work with you on policies that put our babies and toddlers on the path to school readiness and successful lives.*

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RESPONSE OF HIROKAZU YOSHIKAWA TO QUESTIONS OF SENATOR MURRAY AND SENATOR CASEY

SENATOR MURRAY

Question 1. We know from research on early brain research and child development that development and learning start from birth, and even before, and that babies and toddlers start falling behind well before they reach preschool. The National Early Childhood Longitudinal Study shows that disparities in child outcomes are evident at 9 months and grow larger by 24 months of age—well before children enter preschool. These disparities exist across cognitive, social, behavioral, and health outcomes. Yet, people are often puzzled about how public programs can address the early development and learning of infants and toddlers.

How do we raise the importance of reaching babies and toddlers and preventing these gaps from forming, and what should our strategy be to reach them wherever they are?

Answer 1. Evidence-based interventions for families with children from birth to preschool age can be implemented beginning at birth in systems that engage a large proportion of all newborns, such as primary-care systems and well-child visits. Some models exist for how to support families in these systems. In addition, efforts must be strengthened to provide the kind of intensive, onsite professional development that has proven so successful in preschool education to caregivers in different forms of out-of-home child care, birth to age 5.

Question 2. How has the research demonstrated that high-quality, literacy-rich environments beginning in early childhood is one of the most important factors in determining school readiness and success, high school graduation, college access and success and workforce readiness?

Answer 2. In the first years of life, a combination of responsiveness in parenting and caregiving, cognitively stimulating activities, and language-rich conversations that elicit vocalizations and then language from the growing infant and toddler have powerful effects in determining positive future outcomes. Responsiveness—the “serve and return” interaction in which infants’ gestures, affect and vocalization are responded to with nurturing communication from adults, encouraging further communication from the child—is important throughout, but particularly in the first year. As children’s capacities grow in toddlerhood and early childhood, a variety of cognitively stimulating activities such as interactive play, songs, interactive reading with picture books and then story books, and play with toys and materials are important in promoting early learning.

SENATOR CASEY

Question. In both your written remarks and your testimony during the hearing, you referenced emerging evidence that coaching or mentoring teachers on how to improve the quality of their teaching and curricula can be extremely beneficial for students. In the Strong Start Act, in my own legislation the Prepare All Kids Act, and in other programs like Head Start and the CCDBG reauthorization we are working on, we are starting to seriously address teacher quality issues: how we can train and retain teachers with the knowledge of and expertise in working with young children? Is the coaching/mentoring method you discussed in your testimony replicable on a large scale?

Answer. The existing rigorous evaluations of coaching and mentoring in preschool classrooms suggest the following: When coaches are skilled not only in supporting evidence-based, outcome-focused curricula, but also in general good teaching practice and classroom management, both teachers and children can benefit. This approach has been replicated at relatively large scale across entire cities (such as Boston). In addition, in-classroom coaching has been implemented at wide scale at the State level (e.g., New Jersey).

RESPONSE BY JOHN WHITE TO QUESTIONS OF SENATOR MURRAY AND SENATOR CASEY

SENATOR MURRAY

Question 1. How does infant and toddler education fit into a continuum of birth to five services and how can their needs best be met?

Answer 1. As I discussed, Louisiana is currently implementing a comprehensive “birth-to-five system” in which providers across all settings work collaboratively to ensure high-quality programs through: support for teachers, measuring and recognizing progress, and establishing unified expectations for programs serving all children including the State’s youngest citizens. All elements of this system reflect a “birth-to-five” scope, including standards, training, job-embedded support for teachers and common enrollment. Ultimately Louisiana will develop a new accountability or ratings system for all publicly funded programs that will also cover the full “birth to five” scope.

As part of implementation, local community pilots in the field will develop unique, more nuanced approaches to support the teachers and families of younger children. The State plans to learn from and support the scaling of these practices.

Much of the capacity of the “birth-to-five” system relies on developing a corps of early childhood teachers who are skilled at teaching infants and toddlers. To that end the State is developing a Birth to Kindergarten baccalaureate certificate/pathway. Currently the State’s certification includes 3–5 Early Interventionist and PreK–3 levels. Additional work is being done to design an Early Childhood Professional Ancillary Certificate that would serve as a mechanism for improved teacher credentialing primarily for those working in child care which typically serves the State’s largest populations of infants and toddlers.

Question 2. In the allocation of public resources, how do we best coordinate and integrate initiatives ranging from prenatal care to home visiting to infant and toddler care to preschool? What is the best way to break down the silos that impede cooperation, coordination, and resource-sharing?

Answer 2. Until the passage of Act 3, State agencies and programs were independent with varying goals, priorities and operations. This is changing, and it is anticipated that this legislation will be the catalyst for building long-term shared agendas and policy priorities. As Community Network Pilots expand and move forward, the State will have more information on how to build common agendas and policies both at the State and local levels to ensure that infants and toddlers are

not forgotten in a system where more resources, support and people are dedicated to serving 3- and 4-year-olds.

Inherent in this work is the development of a solid leadership structure within each Community Network Pilot. Each Pilot establishes a Leadership Team which is representative of all types of programs. The State is working to support the development of effective Leadership Teams where all partners have an equal share in the decisionmaking responsibilities related to coordination of services and sharing of resources.

Question 3. In the Fiscal Year 2010 Consolidated Appropriations Act, Congress authorized the Striving Readers Comprehensive Literacy Program. This Act provided \$200 million for a comprehensive literacy development and education program to advance literacy skills for students from birth through grade 12. Georgia, Louisiana, Montana, Nevada, Pennsylvania, and Texas all received grants through the Department of Education for the Striving Readers Comprehensive Literacy program.

As one of six recipients of the funds, how is Louisiana using this funding to improve the quality of instruction for our youngest learners in early childhood education settings?

Answer 3. Comprehensive early literacy services that begin at birth and combine parent literacy, parent education, and child-focused instruction;

Home visits to teach and encourage parents, relatives, and other adults to talk with, read to, and work to build children's early literacy skills through one-on-one reading and instruction;

Literacy coaches/teacher leaders who provide demonstration lessons and co-teaching to support teacher development of early learning/literacy standards and instructional concepts;

Early Childhood LETRS training (see: <http://www.soprislearning.com/professional-development/lettrs-for-early-childhood-educators>);

Preschool and K-3 reading curricula aligned to standards, including the use of computer-assisted tutorials to meet the needs of individual children;

Book distribution/reading programs linked to elementary schools, community centers, doctors' offices and health clinics where you find parents and children together; Summer reading bus in "high-need" communities;

Imagination Library through United Way; and Transitional activities for children and parents to visit preschool, kindergarten, and first grade sites where children will attend the following year.

Question 4. How can we best incorporate families and community partners in early literacy activities?

Answer 4. Survey educators and families to determine needs, interests, and ideas about partnering;

Develop and pass family friendly policies and laws (i.e., leaves of absence for parent/caregivers to participate in schools or education-related activities);

Provide professional development on family and community engagement for faculties;

Offer training for parents and community stakeholders on effective communications and partnering skills;

Provide better information on preschool/school policies and procedures;

Use effective communication tools that address various family structures and are translated into languages that parents/families understand;

Hire and train school community liaisons who know the community history, language and cultural background to contact parents and coordinate activities; and

Collaborate with higher education institutions to infuse parent, family, and community involvement into prep programs.

SENATOR CASEY

Question 1. As you described, Louisiana has gone to great lengths to improve coordination between early learning programs in the State. Has Louisiana taken any steps to promote greater alignment between these same early learning providers and the K-12 system?

Answer 1. Yes. We believe strongly in Louisiana that aligning a birth to 12 system is fundamental to achieving the outcomes for students we want.

Historically, we are able to demonstrate through our State-funded PreK program (LA 4) that students benefit at least through the 8th grade from high-quality PreK. This continues to demonstrate to K-12 superintendents the value of early childhood.

Through the early childhood network pilots, superintendents have been a key participant as well as other traditional district staff. The work connects child care providers, head start operators, and PreK teachers, staff, and principles together under

one vision. This is allowing the K–12 system, particularly in elementary grades, to better align its work and planning from PreK up through higher grades.

Through the State department's field support teams, we work to be consistent in our support and messaging to districts. The same staff that support K–12 initiatives are also supporting the early childhood work.

The early childhood pilots also build on the work of SRCL grants, in those districts that are SRCL participants, by strengthening the relationships with early childhood providers and raising the bar on expectations for learning and development outcomes for children at all ages.

RESPONSE OF CHARLOTTE BRANTLEY TO QUESTIONS OF SENATOR MURRAY

Question 1. In 2012, in its report *Unfinished Business: Continued Investment in Child Care and Early Education is Critical to Business and America's Future*, the Committee for Economic Development updated its recommendations on early childhood education to “recommend meeting the comprehensive early learning and development needs of children *as early as possible in their lives*, especially for those whose healthy development is most at risk.” They noted that in the past,

“CED has called for Federal and State funding sufficient to ensure access to high-quality preschool for all. *We now amend that recommendation to include the range of high-quality early childhood programs and services that have demonstrated effectiveness for children from birth to age five.*”

They went on to exhort their constituency by citing reaching pregnant women and parents of infants and toddlers through programs such as home visiting, developmental screening, high quality child care, and expansion of Early Head Start, saying **“Business leaders should tell policymakers those strategies are just as important to them as preschool.”**

So the question is how can we give these strategies the importance they deserve and avoid making infants and toddlers an afterthought?

Answer 1. Decades of scientific research has demonstrated the critical importance of the first 3 years of life in the development of the human brain. As stated by Zero to Three,

“A newborn’s brain is about 25 percent of its approximate adult weight. But by age 3, it has grown dramatically by producing billions of cells and hundreds of trillions of connections, or synapses, between these cells.”

It is imperative that we better educate policymakers, funders, business leaders, parents, school districts, and early childhood providers of the necessity of offering a good, healthy start to all our children, beginning during pregnancy whenever possible. At a minimum, we must ensure that all our children have a medical home starting at birth, and that their parents have access to quality information and supports as they nurture their infants and toddlers. For those with deeper needs such as children having developmental delays, or parents who need child care to support their employment, we must ensure sufficient funding to support high quality home visiting and center-based options, with competent and well-compensated staff.

Question 2. Studies of the quality of child care have consistently found infant-toddler care overall to be of poor to mediocre quality. Yet, 6 million children under age 3 spend some of their day in childcare and it thus becomes an important setting for shaping their earliest development. We often think of literacy as beginning when children start to learn to read. But it actually starts in the early communications stages, as infants. Studies show that gaps in language abilities among children of different socio-economic status start to emerge before the first birthday and widen so that by age three, the gap is pronounced.

How can we better incorporate early language and literacy into early care and learning programs starting at birth?

Answer 2. Substantive training in the foundations of early language and literacy development is essential for all staff working in infant/toddler child care and other early care/education settings. However, traditionally our focus has been on preschool development and beyond. We are finally beginning to recognize that the knowledge, skills and abilities of a successful infant/toddler teacher differ in many important ways from those required by a preschool or early elementary teacher. Specific training for these individuals, and a broadened base of knowledge in the field of how best to support our very youngest learners is becoming more available in the mainstream, but concerted effort is still needed in many parts of our early childhood system. This area of knowledge and competency for teachers must be incorporated into the content of courses required by State licensing authorities for lead teachers in infant/toddler classrooms. In addition, as more school districts begin to think about

serving children in this age range within their preschool programming, we have to incorporate this specific area of knowledge into teacher licensing.

Question 3. The Maternal, Infant, and Early Childhood Home Visiting program was established in the Patient Protection and Affordable Care Act. This program facilitates collaboration and partnership at the Federal, State, and community levels to improve health and development outcomes for at-risk children through evidence-based home visiting programs.

Can you describe the need for increased support for infants and toddlers? Specifically, what role do you see home visiting programs playing in child development? And what more do we need to be doing?

Answer 3. Home visiting is especially important in reaching low-income families whose very young children are not enrolled in Early Head Start or other high quality early childhood care and education programs. A well-trained home visitor, using evidence-based models, cannot only provide good information to a parent, but can also help relieve the isolation often faced by young low-income parents of infants and toddlers. In addition, a trusted home visitor can also play a strong role in encouraging the parents/caregivers to make their own plans for continuing their education and working toward the self-sufficiency of their family. We must pay close attention to the particular competencies home visitors need to be most effective, and ensure these form the basis for training and for making hiring decisions. Many families in more isolated communities, where these services can be most beneficial, are very cautious about allowing people from outside their community into their homes. It is often essential to reach people from within such a community who are interested in becoming trained as home visitors.

[Whereupon, at 12 p.m., the hearing was adjourned.]

